



**BERKELEY FARMS, Inc.**

P.O. Box 8465 • Emeryville • California 94662-0465 • Telephone (510) 420-5600

February 23, 1993

Juliet Shin  
Hazardous Materials Specialist  
ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY  
80 Swan Way, Room 200  
Oakland, CA 94621

RE: 23555 Saklan Avenue, Hayward, California  
Your letter of January 29, 1993 to Frank E. Sabatte

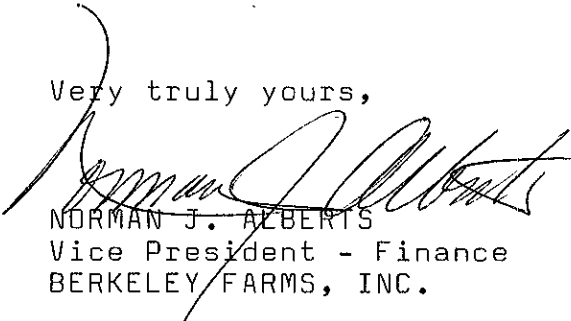
Dear Ms. Shin:

In response to your request, please be advised that we have engaged Paradiso Construction and KEI to prepare a work plan for the above referenced property. Upon approval of said plan, we will be prepared to perform the work required.

We are enclosing a copy of the October 10, 1990 Soil and Ground Water Investigation Report which was prepared for the site.

If you have any further questions, please call me at 420-5636.

Very truly yours,

  
NORMAN J. ALBERTS  
Vice President - Finance  
BERKELEY FARMS, INC.

NJA:blh  
encl.

13507 Blackie Rd., Bldg "B", Castroville, CA 95012-3211 (408) 633-2697

2680 Cloverdale Avenue, Concord, CA 94518-2403 (510) 676-5858 • 910 Warburton, Santa Clara, CA 95050-3929 (408) 243-3997  
561 Eccles Avenue, South San Francisco, CA 94080-1983 (415) 871-8303 • 2065 Oakdale Avenue, San Francisco, CA 94124-2096 (415) 821-5900



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ENVIRONMENTAL  
CONSULTING INC.**

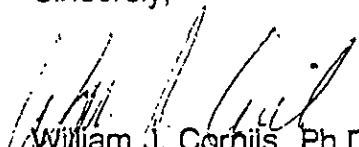
October 10, 1990

Mr. Tim Blaney  
Berkeley Land Company  
1211 Newell Avenue, Suite 120  
Walnut Creek, CA 94596

Dear Tim:

Certified Environmental Consulting, Inc. is pleased to provide the attached report on the Phase II work. CEC recommends that a copy of this report be sent to The County of Alameda and The San Francisco Regional Water Quality Control Board. If you have any questions, please do not hesitate to contact us.

Sincerely,



William J. Corniis, Ph.D., C.I.H.  
Vice President



Michael T. Noble, C.I.H., REA  
Vice President

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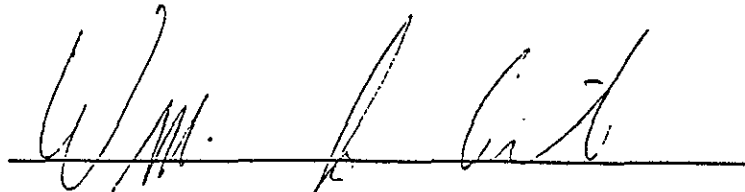
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Sampling

## CERTIFICATION

89-57-237

This report was prepared by Certified Environmental Consulting, Inc. under the professional direction and review of the person whose name is shown below.

The recommendations and professional opinions presented herein, within the limits prescribed by the client, were prepared in accordance with generally accepted professional engineering and industrial hygiene practice. There is no other warranty, either expressed or implied.



William J. Cornils, Ph.D., C.I.H.

## EXECUTIVE SUMMARY

As required by State and local regulations, the Berkeley Land Company removed an underground fuel tank located on their property at 23555 Saklan Road, Hayward, California. The removal occurred in June 1988. Analysis of the excavated soil indicated total petroleum hydrocarbon concentrations of 57 ppm in the gasoline range and 140 ppm in the diesel range. A letter dated October 13, 1989, from the Alameda County Department of Environmental Health, indicated that two samples collected from the bottom of the excavation contained hydrocarbon levels of 2076 and 24,144 ppm. The County's letter requested Berkeley Land Company to conduct a preliminary assessment to evaluate the extent of the soil and groundwater contamination. Information from the preliminary assessment would be used to assess the need for additional actions at the site. Prior to beginning the assessment the County requested that a work plan be prepared which complied with the requirements outlined in the October 13, 1989 letter.

→ Results  
from  
stockpiled  
oil

Berkeley Land Company contracted with Certified Environmental Consulting, Inc. (CEC) to do the preliminary assessment. On February 27, 1990 CEC started work on phase I of the preliminary assessment. Using existing information and minimal exploration at the site, CEC gathered the necessary information to prepare the work plan required by the County. On March 26, 1990 the results and the work plan were provided to Berkeley Land Company in a report titled "Initial Site Survey and Preliminary Assessment Plan for Hayward Site."

On May 21, 1990 field work on phase II of the preliminary assessment was started. The objectives of phase II were to install monitoring wells and bore holes to accurately determine the groundwater gradient and to assess the extent of soil and groundwater contamination.

The results of the phase II work determined that the groundwater gradient is in a southwest direction. All soil and water analyses up gradient from the tank excavation site showed non detectable concentrations of petroleum hydrocarbons. Soil in two drill holes immediately down gradient of the excavation site were contaminated with diesel and gasoline components. Groundwater analyzed in the down gradient direction from the excavation site did not show significant levels of petroleum hydrocarbon contamination.

The conclusion is that the source of the contamination is from the site and not from an off-site source. It was also concluded that the contamination has reached the western edge of the property and is probably moving onto neighboring properties.

It is recommended that the areas of highest contamination be remediated. It is further recommended that the three existing wells on this site be destroyed. The remaining wells that were installed during this investigation must be sampled quarterly.

It will be to the best interest of the Berkeley Land Company if these recommendations are acted on immediately.



## SECTION 1.0

### INTRODUCTION

#### 1.1 BACKGROUND

In June 1988 Berkeley Land Company removed an underground fuel tank located on their property at 23555 Saklan Road, Hayward, California. The removal of the tank was required by state and local requirements. Berkeley Land Company and the previous owner had stored gasoline in the tank. Berkeley Land Company has records from their fuel supplier which indicate that the only product purchased for storage in the tank was gasoline. The previous owner has indicated to Berkeley Land Company and their attorney Mr. Ronald Hufft that the tank was not used for several years before the sale of the property and then was only used for gasoline storage. *- Did he install the tank?*

Two composite soil samples collected by Kaprealian Engineering, Inc. on November 7, 1988 from approximately 130 cubic yards of stockpiled soil at the site had total petroleum hydrocarbon concentrations as gasoline (TPH-G) at 57 parts per million (ppm) and total petroleum hydrocarbon concentrations as diesel (TPH-D) at 140 ppm. There was no benzene, toluene, ethylbenzene or xylene detected in the samples.

The Alameda County Department of Environmental Health wrote Berkeley Land Company on October 13, 1989 informing them that analytical results of two samples taken from the tank pit indicate a hydrocarbon level of 2076 ppm and 24,144 ppm (see Appendix A). The

County's letter stated that it considered this to be an unauthorized release requiring further investigation. A preliminary assessment was requested to determine the extent of soil and groundwater contamination. According to the County the information gathered by this investigation will be used to assess the need for additional actions at the site.

## 1.2 SITE DESCRIPTION

The site is located at 23555 Saklan Road, Hayward, California. The nearest cross street is Middle Lane. A site location map is shown in Figure 1.1.

The Saklan Road site covers an area approximately 40,000 square feet. Each side of the site is 200 feet long (see Figure 1.2). There are no structures on the site except a 8 by 10 foot wooden shed owned by Berkeley Land Company and a mobil office owned by Quality Tow. An 8 foot high chain-link fence surrounds the property and divides it into two areas.

Quality Tow rents the larger of the two areas for storage of automobiles. This portion of the property is covered with dirt. A 4 inch concrete slab was encountered under this dirt at some of the test locations.

The smaller area on this property is covered with 6 to 8 inches of concrete. It was in this area that the underground tank was removed and the production well with the floating product was discovered (see Figure 1.2). Berkeley Land Company uses this area to store trucks.

The area immediately adjacent to the property is mixture of residential and light industry. To the east, directly across Saklan Road, is a residential area consisting of single family homes. It appears that many of these residential properties have their own water wells.

The other areas adjacent to the Saklan site are light industry consisting of trucking terminals, a motorcycle repair shop, a sheet metal shop, etc. The regulatory file review discussed in the phase I report of March 26, 1990, identified nine properties within a few blocks of the Saklan site which had a potential for having leaking underground tanks.

### 1.3 PREVIOUS WORK FROM PHASE I OF THE PRELIMINARY ASSESSMENT

On February 22, 1990 Certified Environmental Consulting, Inc. (CEC) provided Berkeley Land Company with a proposal to do phase I of the required preliminary assessment. The goal for phase I was to collect information concerning the groundwater gradient and contamination using the existing wells and screening techniques such as the vapor probe and hand augers. The information collected in phase I would be used to prepare a work plan which complies with the requirements of the October 13 , 1989 letter from the County. The phase I part of the assessment was conducted on February 27, and March 1, 1990.

The phase I work indicated a water gradient flowing towards the northwest. This was determined from the three existing wells. After investigating the construction of these three wells, the accuracy of the groundwater gradient calculation was questionable. The wells were constructed differently and were installed to different depths. Therefore the wells

could be indicating the hydrostatic pressure of different portions of the same aquifer or even different aquifers. Additionally, 2.2 feet of diesel was observed floating on the surface of the water in the production well near the tank excavation. This had been previously noted by Berkeley Land Company. This material was analyzed and determined to be 100 percent diesel number 2.

The vapor probe of the property detected hydrocarbon vapors at various locations throughout the site. Hand augered borings were also drilled at the two locations shown in Figure 1.3.

*no data*

Drill hole "A" was located in the center of the excavation site. This boring was drilled to a refusal depth of 10 feet. At the 10 foot level a very hard layer was encountered. This probably was the concrete pad for the excavated tank. The analysis of the soil at this level indicated a TPH-D concentration of 40 ppm. The TPH-G concentration was less than detectable limit of 10 ppm. The concentration of the gasoline components benzene, toluene, ethylbenzene, and xylene (BTEX) were ND<3, 15, 6, and 13 parts per billion (ppb) respectively.

Drill hole "B" was located 10 feet north from the edge of the excavation. Contamination in this drill hole was first encountered at 13.5 feet. The TPH-G and TPH-D concentrations were ND<10 ppm, 40 ppm respectively. The BTEX concentrations were all less than the detectable levels of 3 ppb. At 15.5 feet the TPH-G and TPH-D concentrations were

ND < 10 and 550 ppm respectively. Both benzene and toluene were less than the detectable level of 3 ppb. Ethylbenzene and xylene were found at concentrations of 4 and 10 ppb respectively. The analytical information on drill holes A and B is summarized in Table 1.1.

The detailed results of the phase I work were presented in a report titled "Initial Site Survey and Preliminary Assessment Plan for Hayward Site" which was sent to the Berkeley Land Company on March 26, 1990. This report also complied with the requirements for submitting a Work Plan as required in the County's letter of October 13, 1989.

#### 1.4 PROGRAM OVERVIEW AND OBJECTIVES

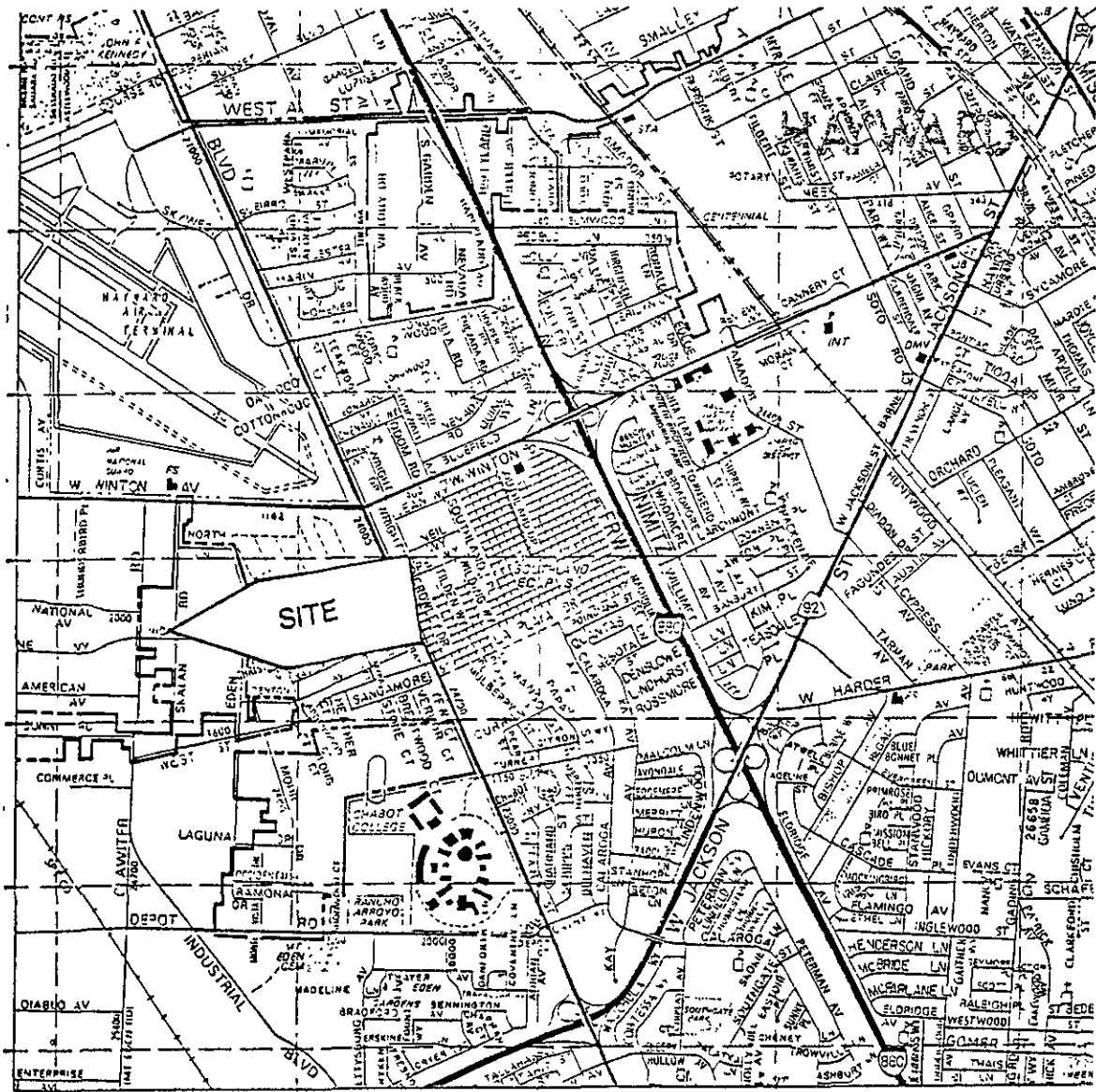
As previously discussed the phase I portion of the preliminary assessment was to gather readily available information on the site and to prepare a work plan for the characterization of the soil and water contamination. The characterization was carried out under phase II of the preliminary site assessment.

The following were the objectives of phase II:

- Install four monitoring wells to accurately determine the groundwater gradient.
- Using these four wells and additional wells as required, characterize the groundwater contamination.

- Collect soil samples during the installation of the monitoring wells and the additional soil borings to characterized the soil contamination.

Originally CEC recommended that privately owned water wells in the surrounding area also be sampled for contamination. At the direction of Berkeley Land Company's legal counsel it was decided no to do the private well sampling at this time.



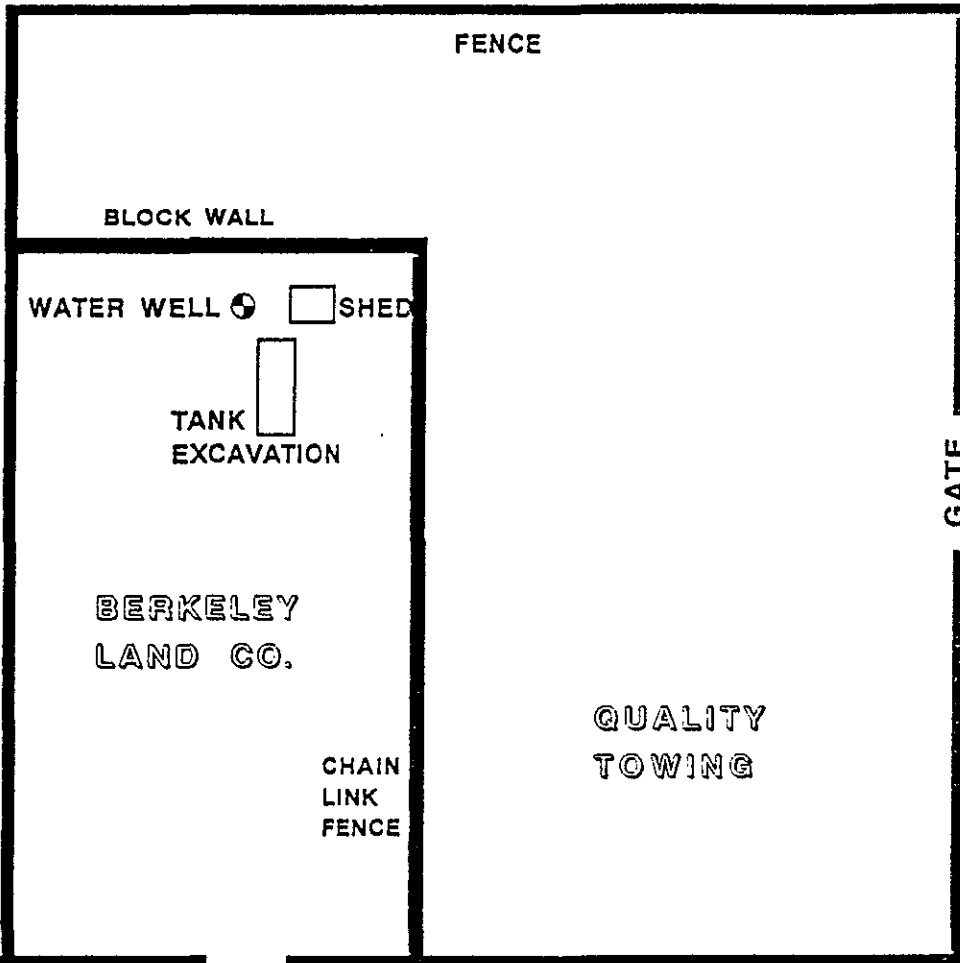
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FIGURE 1.1 - SITE LOCATION MAP

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89-57-237



GATE

MIDDLE LANE

GATE

SAKLAN STREET

SCALE: 1" = 40'



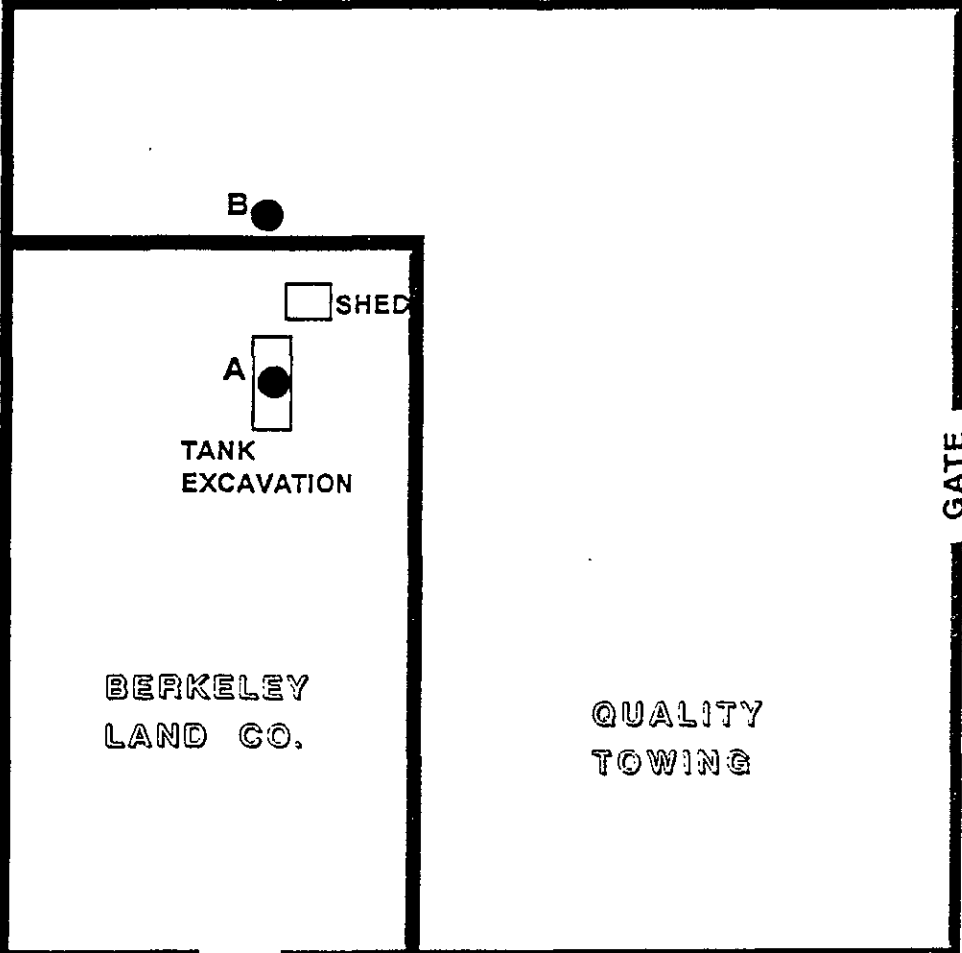
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FIGURE 1.2  
SITE MAP





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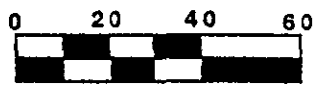
QUALITY  
TOWING

SAKLAN STREET

GATE

MIDDLE LANE

SCALE: 1" = 40'



FEET



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FIGURE 1.3  
DRILL HOLE LOCATIONS  
FROM PHASE I STUDY

TABLE 1.1  
ANALYTICAL RESULTS FROM SOIL SAMPLING CONDUCTED  
DURING PHASE I OF THE PRELIMINARY ASSESSMENT

Sample Number	Drill Hole	TPH-G (ppm)	TPH-D (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylene (ppb)
BC-0227-A120	A	ND<10	40	ND<3	15	6	13
BC-0227-B163	B	ND<10	40	ND<3	ND<3	ND<3	ND<3
BC-0227-B186	B	ND<10	550	ND<3	ND<3	4	10

*→ 15.5' bgs*

## **SECTION 2.0**

### **PROCEDURES**

Details on the following procedures were discussed in the work plan prepared by Certified Environmental Consulting, Inc. (CEC). The date of the work plan was March 26, 1990.

#### **2.1 SUBSURFACE INVESTIGATION**

To characterize the groundwater contamination and to determine the groundwater gradient, it was decided to install five monitoring wells. Four of the monitoring wells were positioned as close as practical to the four corners of the property. All four monitoring wells were also constructed inside the fenced area to provide additional protection from possible tampering. The positions of these four wells are shown as MW-1, 2, 4, and 5 in Figure 2.1.

The main purpose for the four wells was to accurately determine the groundwater gradient. Secondly, the wells were used to measure groundwater contamination both up gradient and down gradient at the site. Such information would indicate if contamination was being carried onto the property from other sources or if contamination was being carried off site to neighboring properties.

The fifth monitoring well (MW-3) was positioned within 10 feet of the tank excavation in the down gradient direction (see Figure 2.1). This fulfills the requirement of installing a monitoring well in the verified down gradient direction within the immediate vicinity of the

site as required by the County in their letter of October 13, 1989. This well has been used to determine if contamination is migrating from the tank excavation.

Soil borings were also made during phase II of this investigation. These borings were done to characterize soil contamination. The boring locations were selected to determine if potential soil contamination was the result of off-site or on-site contaminant sources.

During both the soil boring and the monitoring well installation, undisturbed soil samples were collected at least every 5 feet. These samples were collected for physical and/or chemical analysis. Additionally, field notes were kept describing field activities (see Appendix B) and soil boring logs were kept to show the different layers of material encountered during the drilling process (see Appendix C).

## **2.2 DRILLING PROGRAM**

The drilling was done by Bay Land Drilling Company using both CME 55 and 75 drill rigs with nominal 8 and 10 inch OD hollow-stem augers. Bay Land Drilling Company is a licensed drilling contractor in the State of California.

The drilling operation was under the supervision of Richard C. Kent. Mr. Kent is a Registered Geologist in the State of California (No: 4231).

The drilling process for both the monitoring wells and soil borings was identical except the bore hole diameter for the wells was 10 inches rather than 8 inches so that the 4 inch well casing could be accommodated. Drilling began by identifying the well or bore hole location. Because concrete covered some of the property, a hole had to be cut before the drilling could be started.

Next, the hole was drilled to a depth 4 to 5 feet. Without raising the auger flight from the hole, the plug in the bottom of the auger was removed. Through the center of the auger a sampler was pushed 18 inches in front of the drill head to collect an undisturbed soil sample for physical and/or chemical analysis. The sampler was a standard penetration test split-spoon sampler, nominal 2 inch diameter, with three brass retainers.

The number of blows to drive the sampler into the soil using a 140 pound drop hammer, was recorded to determine the density of the material sampled. Following removal of the sampler the plug was reinstalled and the drilling was resumed. This drilling and sampling regime continued until the maximum depth was reached. Maximum depth was 15 feet for bore holes and 25 to 30 feet for monitoring wells. During the drilling, special attention was given to the avoidance of cross contaminating underlying aquifers. When boring in a zone of saturated permeable material, the geologist would cease drilling if 5 feet of impermeable material, such as clay, were reached. The clay layer was considered an aquiclude separating the shallow and deep aquifers and was not penetrated.

After the sampler was removed from the boring, it was opened and the three brass retainers were removed. The ends of the middle retainer were sealed with aluminum foil and plastic caps. Tape was wrapped around the caps to further seal the retainer. The retainer was marked with a unique sample identification number, sealed in a plastic bag and placed in an ice chest kept at 4°C for delivery to a State certified laboratory for chemical analysis. Chain-of-custody records were completed for each sample delivery

In general soil samples from every 5 foot interval were analyzed for chemical constituents, although some discretion by the site geologist was used.

The soil in the remaining tubes was extruded and examined on-site by the geologist for soil type and the obvious presence of contamination. The presences of obvious contamination was verified using an organic vapor meter. The soil and soil cuttings generated during drilling were classified using the Uniform Soil Classification System. All observations were recorded in the boring logs.

Before another sample was collected, the sampler and brass retainers were decontaminated by steam cleaning, or an Alconox solution wash followed by tap water and deionized water rinses.

After the cuttings were evaluated by the geologist, they were placed in drums and sealed. A label was affixed to the drum describing its contents, name of a contact person, and

telephone number. The drums were kept in a secure area to prevent tampering by unauthorized persons. Final disposition of the soil was dependant on the sample results. Abandoned sample bores were sealed with bentonite or a bentonite concrete grout mix.

All drilling equipment was steam cleaned before and after drilling of each hole. Only clean water from a municipal supply was used for cleaning the drilling equipment.

### 2.3 INSTALLATION OF GROUNDWATER MONITORING WELLS

Some of the exploratory borings developed into groundwater monitoring wells. The borings used for monitoring well construction were deeper and a larger diameter.

When the appropriate boring depth was reached, the plug at the bottom of the augers was removed. The on site geologist then designed the well construction. Depending on the well design, borings were back filled with bentonite pellets prior to installation of the well casing. The geologist designed and installed a 4 inch PVC well casing. The use of glue was prohibited because of its possible interference with the analytical tests. The casing was cleaned and then lowered through the center of the augers. Clean sand was added around the outside of the casing as the augers were slowly lifted from the boring. The sand was added until it reached a height of 2 feet above the screened area of the casing.

Next, 2 feet of bentonite pellets was added followed by portland cement. Finally, a water tight locking cap with cover was constructed. The locking cap prevents unauthorized access to the wells. The as-built well construction drawings are shown in Appendix D.

When the monitoring well installation was complete, *How long a waiting period?* the wells were developed using surging techniques. Well development generally suppresses damage to the formation by drilling operations, restores natural hydraulic properties to the adjacent soils, and improves hydraulic properties near the boring so the water flows more freely in the well.

During development, pH, specific conductance, and temperature of the return water was measured. Well development was continued until these parameters stabilized and the water was at its maximum possible clarity.

The water generated during the development process was placed in 55 gallon drums and sealed. A label was affixed to the drum stating what it contained, name of a contact person, and telephone number. The drums were kept in a secure area to prevent tampering from unauthorized persons. Final disposition of the water depended on the sampling results.

#### 2.4 LEVELING WELLS AND MEASURING DEPTH TO GROUNDWATER

To determine the groundwater gradient, the relative depth to groundwater for each monitoring well and their location were determined. Using a surveyors level, CEC



engineers determined the height to the top of each well casing. The position on the casing where the height was calculated was marked (not all casings were cut level).

From the point where the casings were marked, the depth to groundwater was measured using an electronic water sensing device. It should be noted that the depth to groundwater measurement was not made until the wells had an opportunity to equilibrate with the aquifer. With this information CEC engineers were able to calculate the relative depth to groundwater. Knowing this and the distance between the wells it was possible to determine water gradient.

## 2.5 GROUNDWATER SAMPLING

*How long a wait after development?*

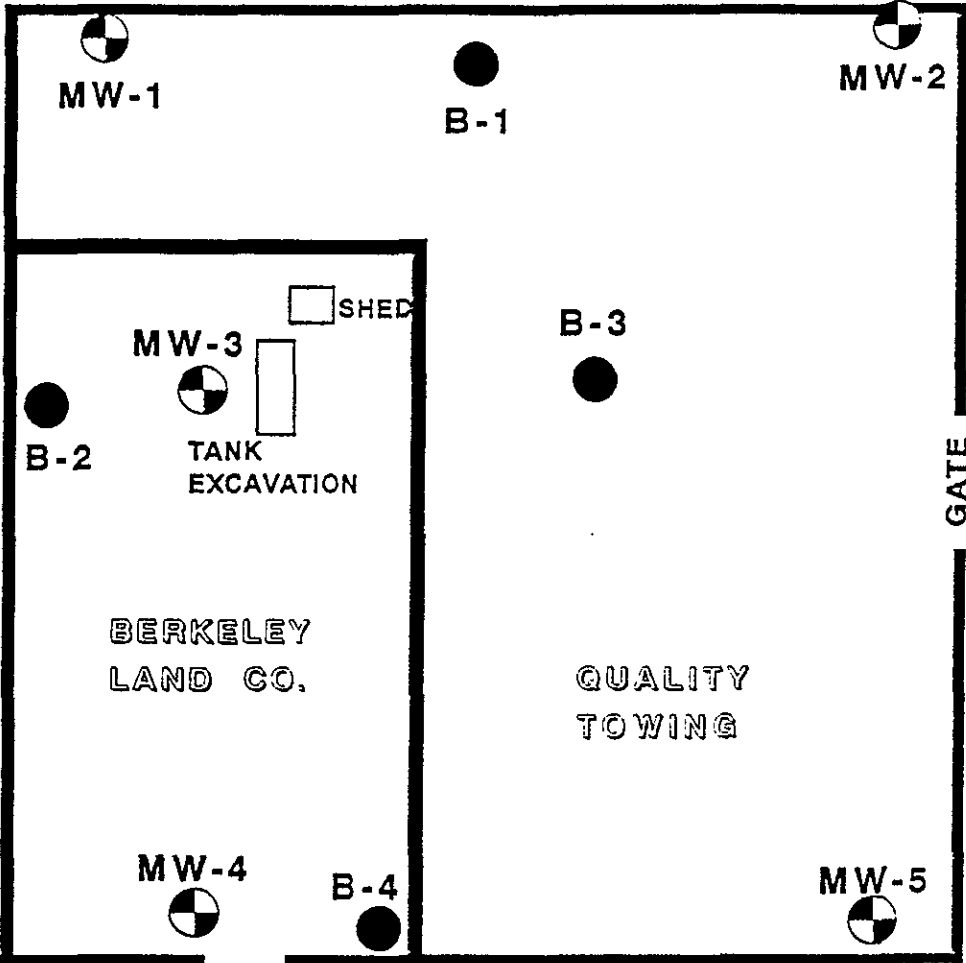
Prior to collecting samples, the wells were purged by pumping at least three well volumes of water. Once the wells had recovered 80 percent of the original water level, water samples were collected using a clean 2 inch bailer. A clean bailer was used for each well.

The water from the bailer was immediately syphoned into a clean 40 mL VOA bottle until the bottle began to overflow. A teflon lined cap was placed on the bottle and the bottle was inverted to check for air bubbles. If air bubbles were detected, the sampling was repeated.

The bottles were labeled with a unique sample number and placed in a ice chest maintained at 4° C. A chain-of-custody form was completed and accompanied the sample to the laboratory.

## 2.6 LABORATORY ANALYSIS

Both the soil and water samples were analyzed for total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylene (BTEX). Superior Analytical Laboratory, Inc. of Martinez, California performed the sample analysis. Superior is certified by the State of California to do hazardous waste analysis.



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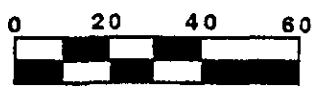
QUALITY  
TOWING

GATE

MIDDLE LANE

-  MONITORING WELL
-  BORING

SCALE: 1" = 40'



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FIGURE 2.1  
WELL AND BORING LOCATION MAP

## SECTION 3.0

### RESULTS

#### 3.1 SITE GEOLOGY

The geology underlying the site was characteristic of the San Francisco Bay area.

This is shown in the drill hole cross sections (Figures 3.1 to 3.3) The drill logs are shown in Appendix C. The clay, to sand to gravel sequences in the upper 7.5' to 8.5' of holes MW-3 and B-1, and most of B-4, are good examples of transgressive/regressive sedimentary sequences. Such sequences develop along beaches as the water and land interface rises and falls over extended periods of time.

The sedimentary sequences in the three previously mentioned holes create an aquifer. Clay-rich layers act as sealants while overlying gravel-rich layers provide the porosity and permeability for groundwater storage and movement.

#### 3.2 SITE HYDROLOGY

On June 7, 1990 engineers from CEC leveled the monitoring wells and measured the depth to groundwater. The procedures for determining the groundwater gradient were described in Section 2.0. The field data collected for this determination is presented in Appendix E.

From the field data it was determined that the groundwater gradient was towards the southwest with a slope. Figure 3.4 overlays the gradient onto the site map.

### **3.3 FIELD OBSERVATIONS OF CONTAMINATION**

According to the boring logs in Appendix C, a moderately strong hydrocarbon odor was detected at 15 feet in drill hole B-2 and at 13 feet in drill hole MW-3. In drill hole MW-3 the hydrocarbon odor became very strong at 15 feet. Both of these drill holes are located in the down gradient direction from the tank excavation.

There was no floating product or hydrocarbon odor associated with the water in the monitoring wells. Even drill hole MW-3, in which very strong hydrocarbon odors were detected in the soil during the drilling, had no noticeable odors or floating product.

### **3.4 ANALYTICAL RESULTS OF THE SOIL ANALYSES**

The procedures for collecting the soil samples and the methods used for analysis have already been discussed in Section 2.0. The chain-of-custody sheets and certified laboratory results are found in Appendix F. The data from the certified laboratory results has been summarized in Table 3.1.

Laboratory results indicated soil contamination at approximately 15 feet in drill holes B-2 and MW-3. As discussed in paragraph 3.3, both these drill holes were in the down gradient

direction from the excavation site. All other drill holes sampled during phase II had non-detectable levels of TPH-G, TPH-D, and BTEX. *for soil*

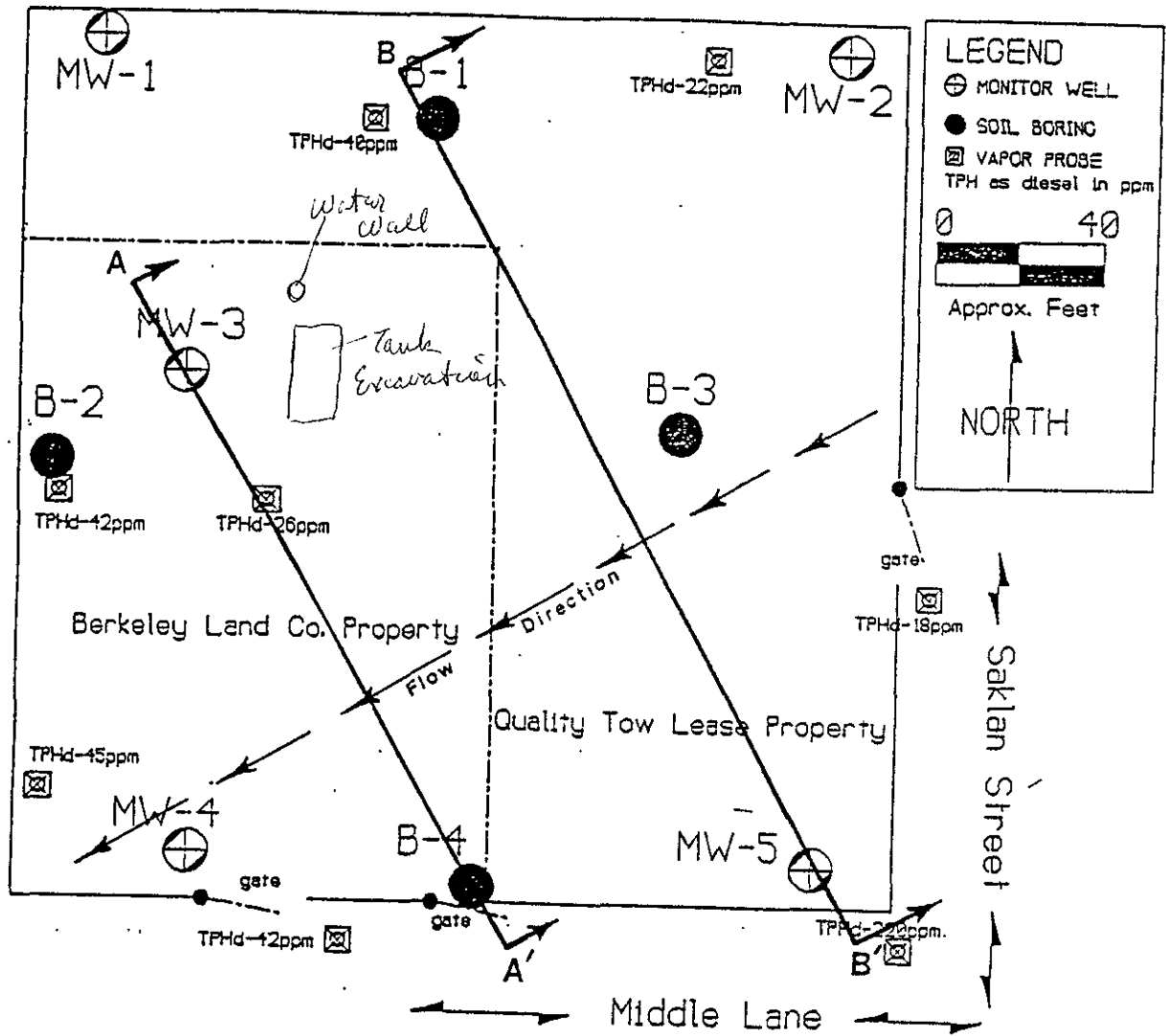
Neither sample from B-2 or MW-3 had detectable concentrations of TPH-G however both had detectable levels of some or all of the four gasoline constituents (BTEX). Drill hole MW-3's BTEX concentrations were 4, 6, 12, and 58 ppb respectively. Drill hole B-2's BTEX concentrations were ND<3, ND<3, 11, and 22 ppb respectively.

Both drill holes had detectable concentrations of TPH-D. The TPH-D levels of MW-3 and B-2 were 250 and 50 ppm respectively.

### 3.5 ANALYTICAL RESULTS OF THE WATER ANALYSES

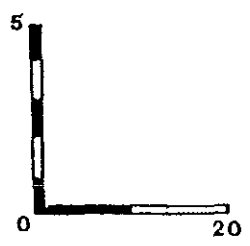
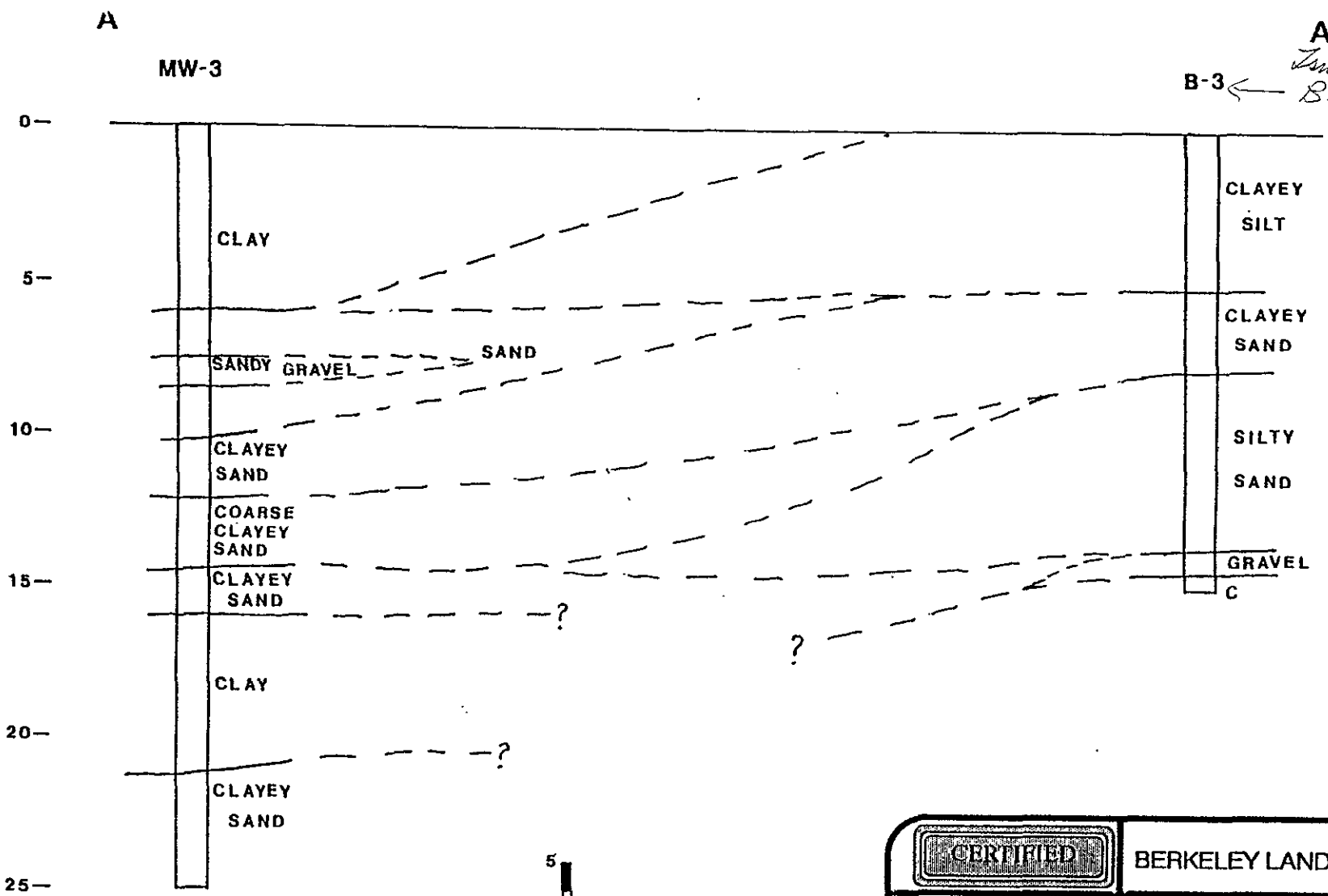
The procedures for collecting water samples and the methods used for analysis were discussed in Section 2.0. The chain-of-custody sheets and certified laboratory results are found in Appendix F. The data from the certified laboratory results has been summarized in Table 3.2.

Only the groundwater from monitoring well MW-3 had detectable levels of contamination. The TPH-G, concentration was 0.10 ppm, however the laboratory indicated that there was no gasoline pattern present. The TPH-D, and BTEX components were not detected.



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FIGURE 3.1 - CROSS SECTION LOCATION MAP



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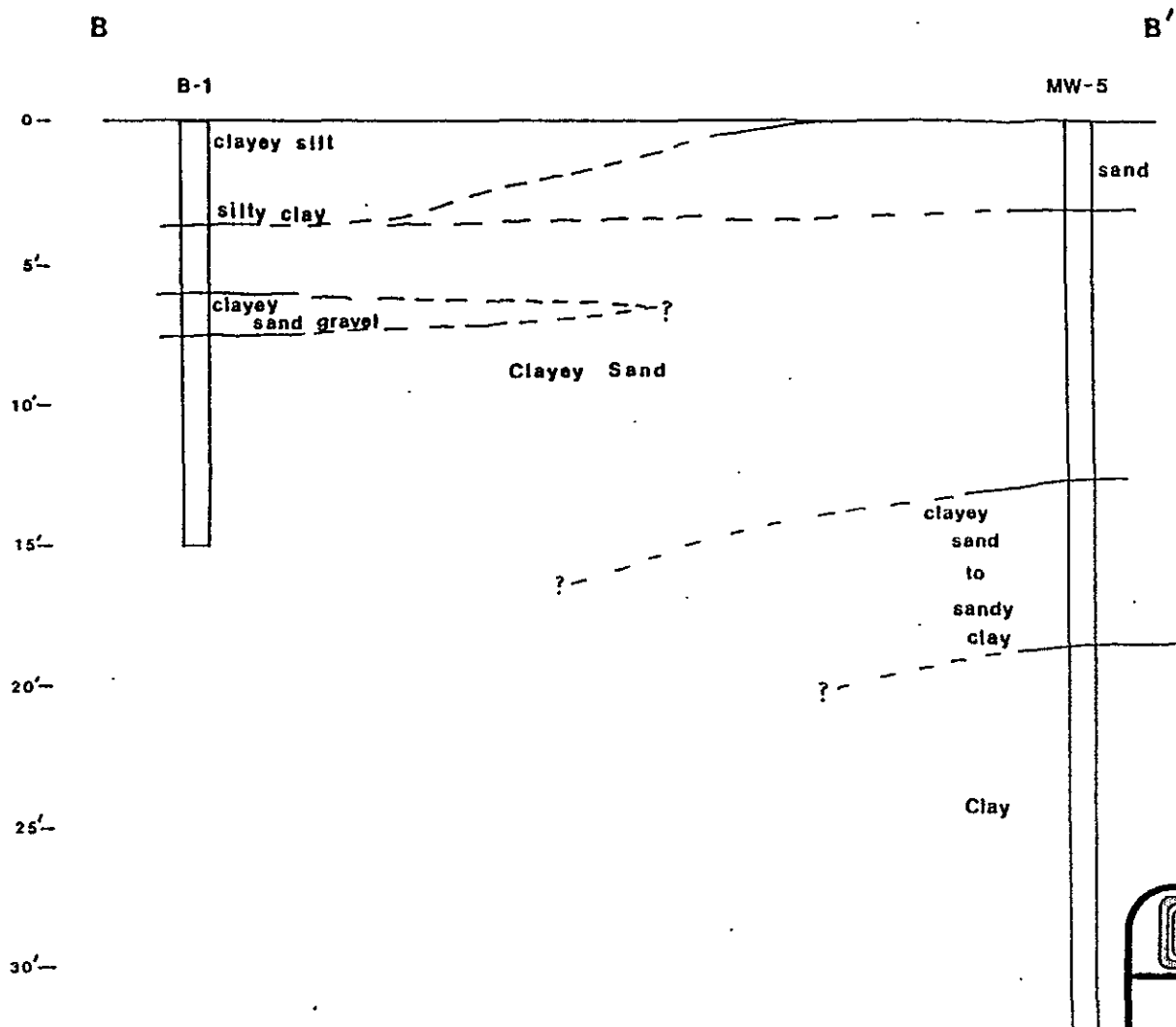
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FIGURE 3.2 - CROSS SECTION OF A TO A'

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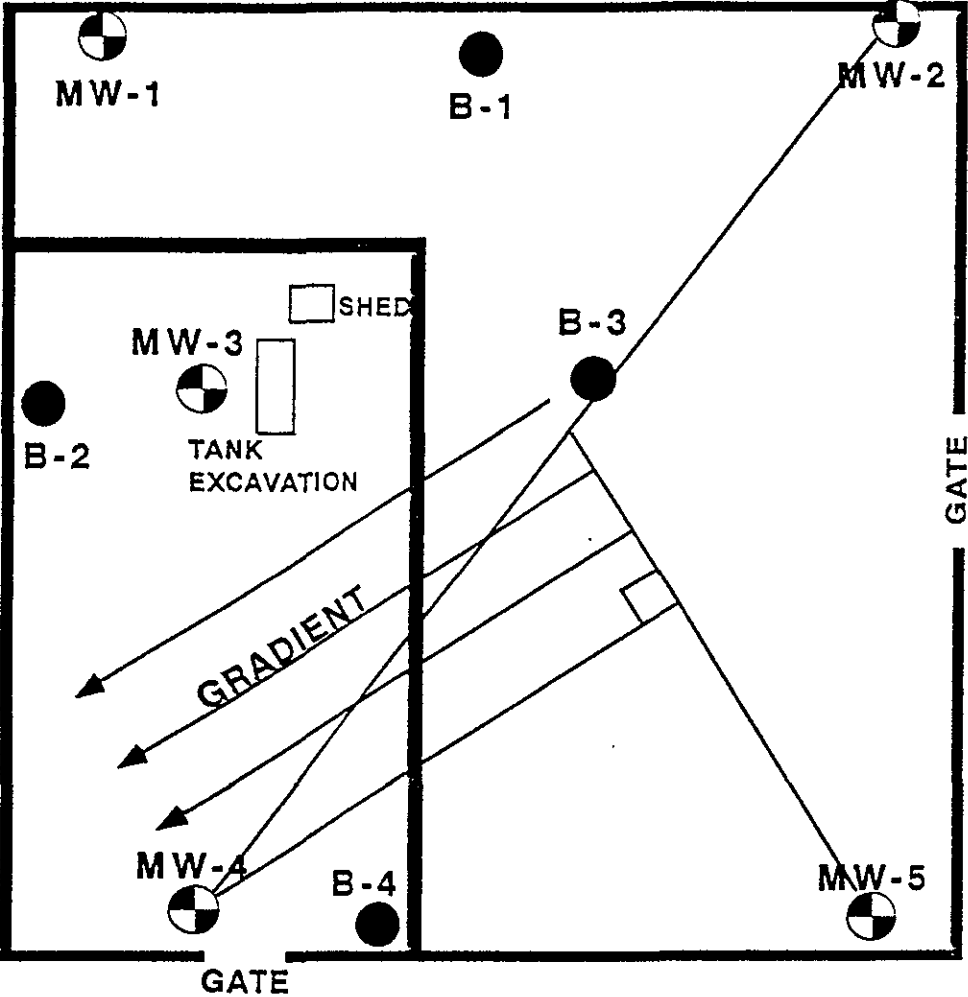
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FIGURE 3.3 - CROSS SECTION OF B TO B'

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- MONITORING WELL
- BORING

SCALE: 1" = 40'



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FIGURE 3.4  
GROUNDWATER GRADIENT

**TABLE 3.1**  
**SUMMARY OF THE ANALYTICAL RESULTS FROM THE SOIL SAMPLING**  
**CONDUCTED DURING PHASE II**

Drill Hole	Sample Number	Depth (ft)	TPH-G (ppm)	TPH-D (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)
B-1	S-1	4	N/A	N/A	N/A	N/A	N/A	N/A
B-1	S-2	6.5	N/A	N/A	N/A	N/A	N/A	N/A
B-1	S-3	10	N/A	N/A	N/A	N/A	N/A	N/A
B-1	S-4	15	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
B-2	S-1	10	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
B-2	S-2	15	ND<1	50	ND<3	ND<3	11	22
B-3	S-1	4.5	-	-	-	-	-	-
B-3	S-2	8.5	ND<1	ND<10	ND<3	ND<3	ND>3	ND>3
B-3	S-3	14.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND>3
B-4	S-1	5	-	-	-	-	-	-
B-4	S-2	10	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
B-4	S-3	15	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-1	S-1	4	-	-	-	-	-	-
MW-1	S-2	10	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-1	S-3	11.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-1	S-4	16.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-1	S-5	21.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-2	S-1	4	-	-	-	-	-	-
MW-2	S-2	6.5	-	-	-	-	-	-
MW-2	S-3(5-8)	11.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-2	S-4(5-9)	16.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-2	S-5(5-10)	21.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-3	S-1	6.5	-	-	-	-	-	-
MW-3	S-2	10	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-3	S-3	15	ND<1	250	4	6	12	58
MW-3	S-4	20	-	-	-	-	-	-
MW-4	S-1	4	-	-	-	-	-	-
MW-4	S-2	6.5	-	-	-	-	-	-

TABLE 3.1 CONTINUED

Drill Hole	Sample Number	Depth (ft)	TPH-G (ppm)	TPH-D (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)
MW-4	S-3	11.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-4	S-4	16.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-4	S-5	21.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-5	S-1	3	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-5	S-2	6.5	-	ND<10	-	-	-	-
MW-5	S-3	10	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-5	S-4	15.5	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3
MW-5	S-5	20	-	ND<10	-	-	-	-

**TABLE 3.2**  
**SUMMARY OF THE ANALYTICAL RESULTS FROM THE WATER SAMPLING**  
**CONDUCTED DURING PHASE II**

Sample Number	TPH-G (ppm)	TPH-D (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)
MW-1	ND<1	ND<1	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-2	ND<1	ND<1	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-3	0.10	ND<1	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-4	ND<0.05	ND<1	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-5	ND<1	ND<1	ND<0.3	ND<0.3	ND<0.3	ND<0.3

SECTION 4.0  
CONCLUSIONS

The conclusions will discuss findings from phase II of the site assessment and the certified laboratory data from soil borings conducted in phase I. Figure 4.1 summarizes the findings from phase I and II. The following are the conclusions that can be made from the available data:

- The water gradient at the time of measurement was in a southwest direction. It should be noted that the gradient could fluctuate due to seasonal variations in rainfall, or other influences on the water table such as large production wells in the immediate area.
  
- Contamination discovered during this site assessment appears to be originating on-site and not coming from an off-site source. This conclusion is supported by the sample results from the drill holes made during the phase I and II study which indicated soil contamination in the down gradient direction or in the immediate vicinity of the excavation. Soil contamination was not found at other locations. Figure 4.2 shows the suspected location of the contaminant plume.
  
- The shape of the contaminated plume may be influenced by both the groundwater gradient and the water well. The water well may be pulling some of the

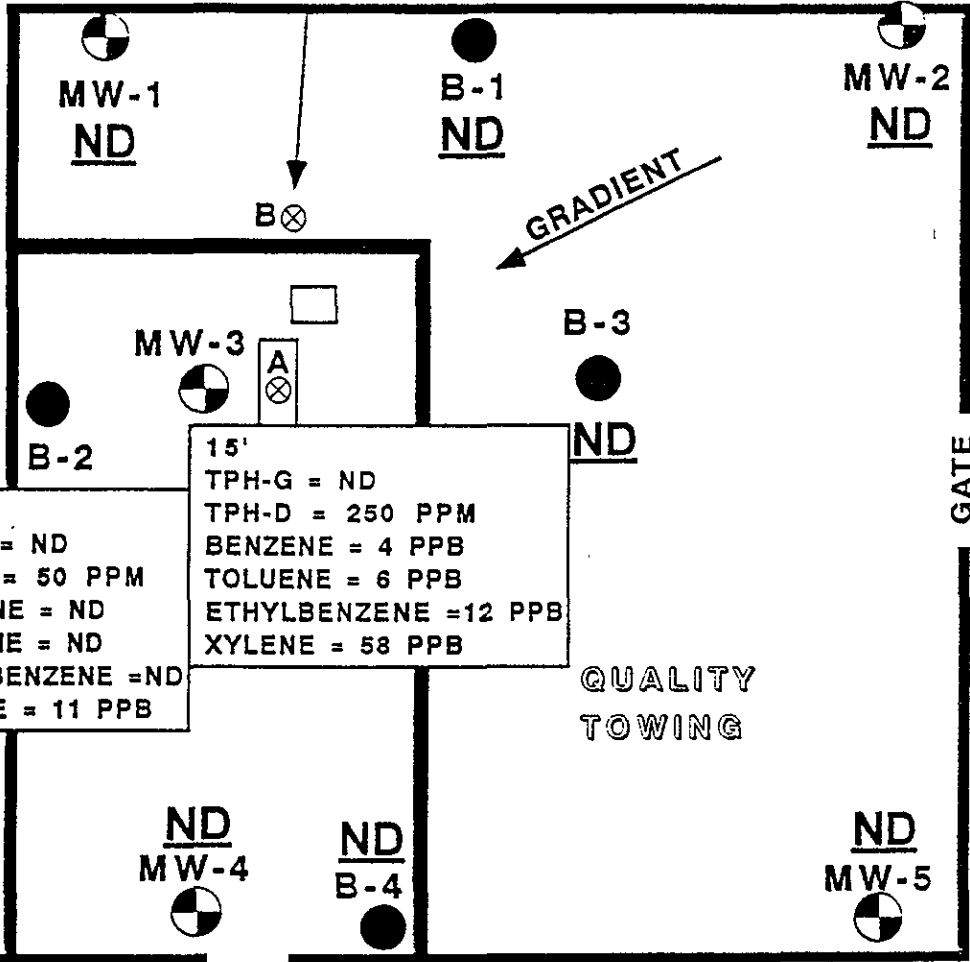
contamination perpendicular to the water gradient towards drill hole B installed during Phase I.

- Contamination consists mostly of petroleum hydrocarbons in the diesel range. However, gasoline components such as, benzene, toluene, ethylbenzene, and xylene were also present.

- At drill hole B-2, benzene and toluene were not detected. But, ethylbenzene and xylene were. This would indicate that the plume front has moved beyond this location into the neighboring property. Benzene and toluene are the lighter gasoline components and have the ability to move through the soil at rate faster than other components. Their absence at B-2 would suggest they have migrated further down gradient.

*Benzene & toluene could also have been the first constituents to volatilize out through time.*

15.5' TPH-G= ND TPH-D= 550  
 BENZENE = ND TOLUENE = ND  
 ETHYLBENZENE = 4 XYLENE = 10



15'  
 TPH-G = ND  
 TPH-D = 50 PPM  
 BENZENE = ND  
 TOLUENE = ND  
 ETHYLBENZENE = ND  
 XYLENE = 11 PPB

15'  
 TPH-G = ND  
 TPH-D = 250 PPM  
 BENZENE = 4 PPB  
 TOLUENE = 6 PPB  
 ETHYLBENZENE = 12 PPB  
 XYLENE = 58 PPB

QUALITY TOWING

SAKLAN STREET

ND  
 MW-4

ND  
 B-4

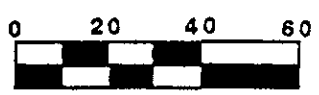
ND  
 MW-5

GATE

MIDDLE LANE

- ND = NON DETECT
- MONITORING WELL
- BORINGS FROM PHASE 1
- BORINGS FROM PHASE 2

SCALE: 1" = 40'

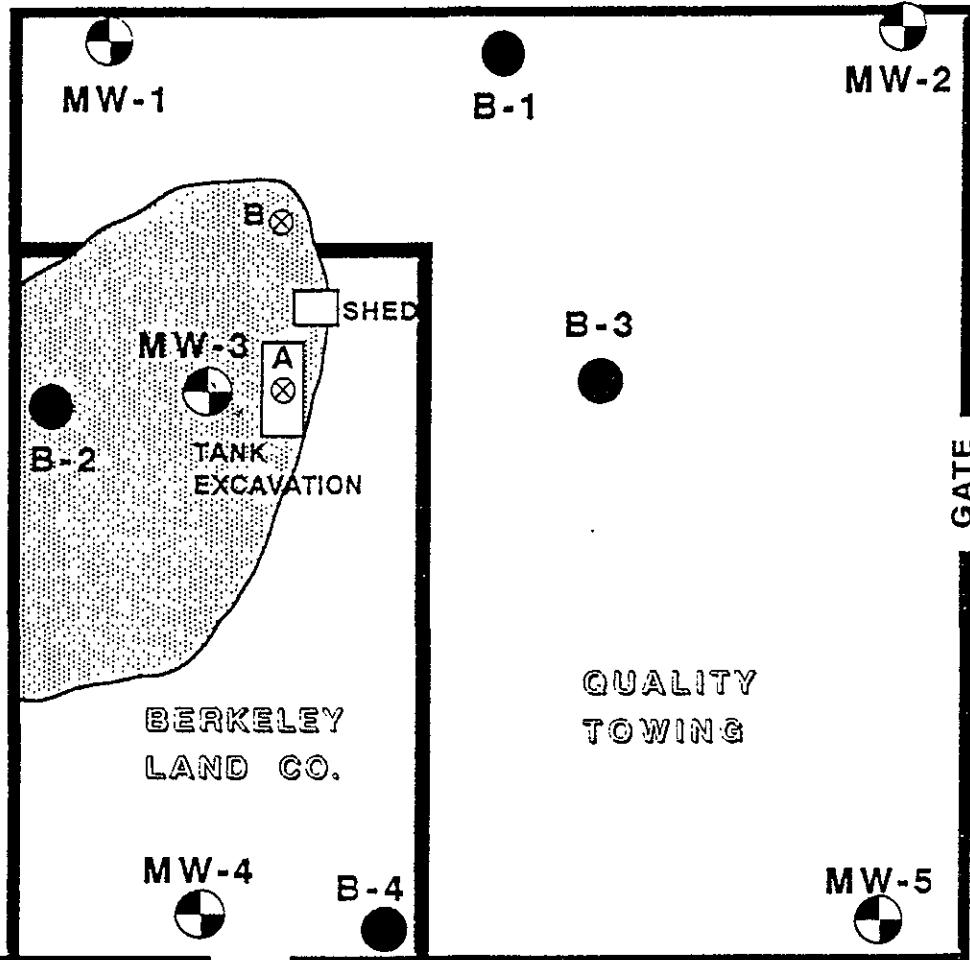





FEET

BERKELEY LAND CO.

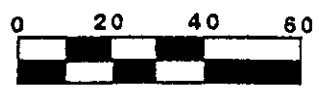
FIGURE 4.1  
 SOIL SAMPLE RESULTS





-  MONITORING WELL
-  BORINGS FROM PHASE 1
-  BORINGS FROM PHASE 2

SCALE: 1" = 40'



FEET



BERKELEY LAND CO.

FIGURE 4.2

SUSPECTED BOUNDARIES OF  
CONTAMINANT PLUME

SECTION 5.0  
RECOMMENDATIONS

CEC makes the following recommendations based on the data presently available:

- Conduct quarterly monitoring of the wells as required by the Regional Water Quality Control Board.
- Prepare quarterly progress reports as required by the County's letter of October 13, 1989. This report is overdue and needs to be completed immediately. This Phase II Assessment Report would suffice for one of these quarterly reports. A copy of the quarterly reports should be sent to the San Francisco Regional Water Quality Control Board.
- Skim the oil from the top of the water well and monitor the well to see if more oil returns.
- If not already completed, Berkeley Land Company needs to contact the appropriate regulatory Agencies concerning the fuel oil floating in the water well. The reporting requirements are outlined in CEC's letter dated May 14, 1990 (see appendix G).

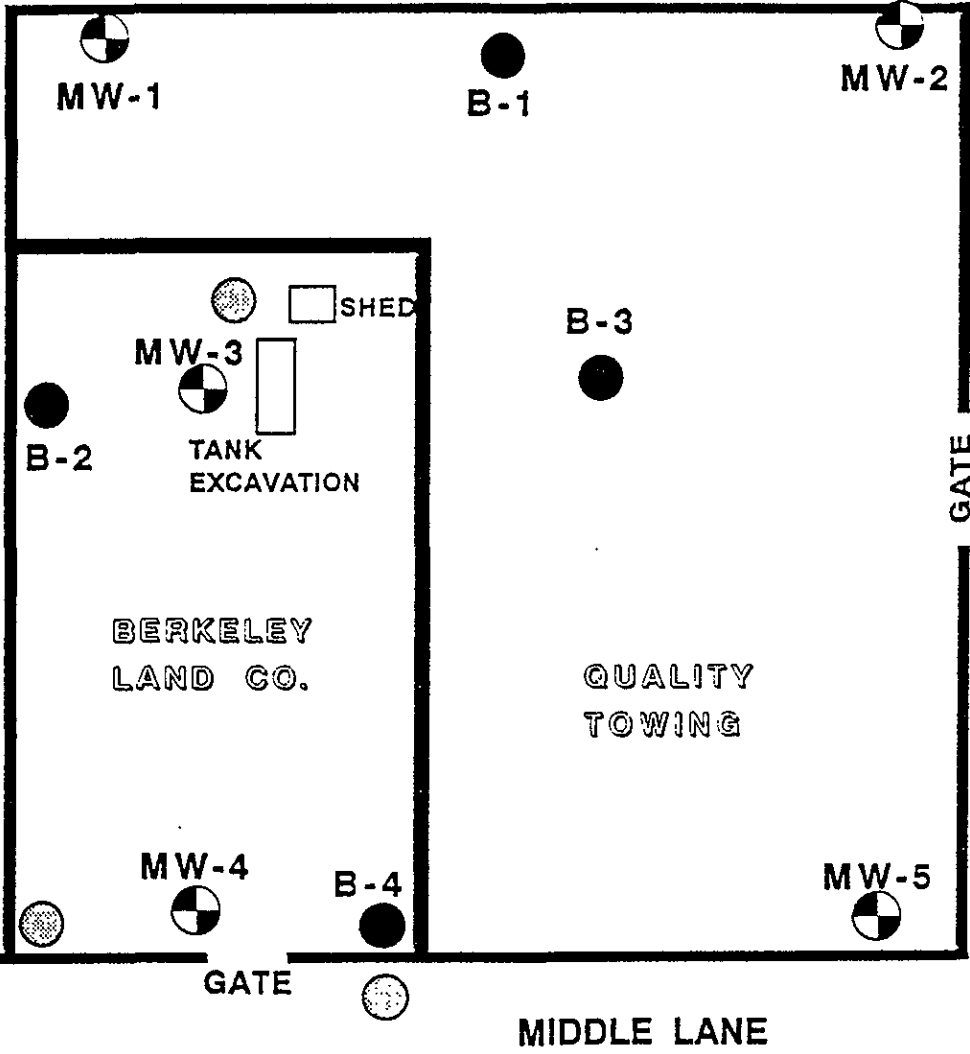
- Destroy the three wells (one water well and two monitoring wells) that were on site prior to this preliminary assessment (see Figure 5.1). These wells have served their intended purpose and are no longer needed. The regulatory agencies encourage this when a well is no longer useful or poses a threat to the underlying groundwater. The water well may be tied to both the upper and lower aquifers at this site. Its existence may provide a pathway for contamination to enter the lower aquifer. This potential pathway must be sealed. The two monitoring wells are not protected and have no future environmental use. The potential exists for these wells to be tampered with by unauthorized persons which could lead to further contamination of the underlying aquifer.
- Check the gradient each quarter during the well sampling to determine if the gradient of the groundwater stays the same or varies.
- Prepare a soil remediation work plan for County approval which could include excavation and disposal or bioremediation. This plan will also address any off-site work to further determine the spread of the contamination if required by the regulators.
- Begin the cleanup process. Table 5.1 summarizes the recommendations and provides an approximate cost for each recommendations. It is in the best interest of Berkeley




Land Company that the work to complete the recommendations be authorized immediately.

- . In support of the off-site investigation it is recommended that both up gradient and down gradient water wells in the immediate area be sampled for contamination.

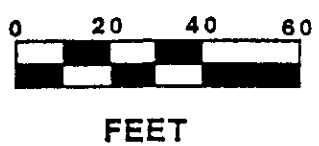
TABLE 5.1  
SUMMARY OF THE RECOMMENDATIONS


Conclusions	Recommendations	Timetable	Estimated Cost
1.) Contamination consists mostly of petroleum hydrocarbons in diesel range and BTEX.	Conduct quarterly monitoring of wells for TPH-G, TPH-D, and BTEX.	Conduct this evaluation quarterly starting immediately	\$2,500.00 per quarter
2.) The shape of the contamination plume may be influenced by groundwater gradient and the water well.	Skim oil from surface of the water well and see if it returns.	Complete this immediately	\$1,000.00
3.) N/A	Contact the appropriate regulatory agencies about the floating product in the water well.	BLC should do this immediately	N/A
4.) N/A	Destroy the three wells that existed on this site prior to this assessment.	Immediately	\$1,200.00
5.) The water gradient at the time of the measurement was in a southward direction.	Verify the gradient at different times of the year.	Conduct this evaluation quarterly starting immediately	Cost included with quarterly monitoring of the wells.
6.) Contamination is originating from on-site.	Prepare a soil remediation work plan.	Immediately	\$3,500
7.) N/A	Conduct soil remediation.	Immediately after regulatory approval of the work plan	\$150k to \$200k
8.) Plume may have moved off site.	Sample water wells in the surrounding area.	Immediately	\$ 320.00 per well



-  WELLS TO BE DESTROYED
-  MONITORING WELL
-  BORING

SCALE: 1" = 40'



 BERKELEY LAND CO.

**FIGURE 5.1**  
**LOCATION OF WELLS WHICH SHOULD BE DESTROYED**

9/90 KAL 89-57-237

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



October 13, 1989

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
20 Swan Way, Rm. 200  
Oakland, CA 94621  
(415)

Mr. John Subuttec  
Berkeley Land Co.  
4550 San Pablo Ave.  
Emeryville, CA 94608

Re: Unauthorized release from underground storage tank, 23555  
Saklan Ave., Hayward

Dear Mr. Subuttec:

As you know, in June, 1988, your underground storage tank was removed from the above location. Analytical results of two soil samples taken from the tank pit indicate a hydrocarbon level of 2076 ppm and 24144 ppm. These are above the threshold level that the Regional Water Quality Control Board (RWQCB) considers to be evidence of an unauthorized release requiring further investigation. An unauthorized release report has been filed with this office; you must now initiate further investigation and/or cleanup activities at this site.

A preliminary assessment should be conducted to determine the extent of soil and groundwater contamination that has resulted from the leaking tank system. The information gathered by this investigation will be used to assess the need for additional actions at the site. The preliminary assessment should be designed to provide all of the information in the format shown in the attachment at the end of this letter. This format is based on RWQCB guidelines. You should be prepared to install one monitoring well, if you can verify the direction of groundwater flow in the immediate vicinity of the site, and three wells if you cannot.

Until cleanup is complete, you will need to submit reports to this office and to the RWQCB every three months (or at a more frequent interval, if specified at any time by either agency). These reports should include information pertaining to further investigative results; the methods and costs of cleanup actions implemented to date; and the method and location of disposal of any contaminated material.

Soils contaminated at hazardous waste concentrations should be transported by a licensed hazardous waste hauler and disposed of or treated at a facility approved by the California Department of

Mr. John Subuttec  
October 13, 1989  
Page 2 of 2

Health Services. Soils contaminated below the hazardous waste threshold may be managed as nonhazardous, but are still subject to the RWQCB's waste discharge requirements. In no case may stockpiled soil with any detectable level of contamination be used to backfill the hole.

Your work plan must be submitted to this office by November 16, 1989. Copies of the proposal should also be sent to the RWQCB (attention: Lester Feldman). You may implement remedial actions before approval of the work plan, but final concurrence by this office will depend on the extent to which the work done meets the requirements described in this letter.

You will need to submit an additional deposit of \$333 to cover costs that the Division of Hazardous Materials incurs during remediation oversight. If you have any questions about this letter or about remediation requirements established by the RWQCB, please contact the undersigned, at 271-4320.

Sincerely,



Thomas F. Peacock, Senior HMS  
Hazardous Materials Division

TP:tp

enclosure

cc: Howard Hatayama, DOHS  
Lester Feldman, San Francisco Bay RWQCB  
Gil Jensen, District Attorney, Alameda County Consumer and  
Environmental Protection Agency  
Rafat Shahid, Assistant Agency Director, Environmental Health



## WORK PLAN REQUIREMENTS FOR AN INITIAL SUBSURFACE INVESTIGATION

This outline should be followed by professional engineering or geologic consultants in preparing work plans to be submitted to the RWQCB and local agencies. Work plans must be signed by a California-registered engineer or geologist.

This outline should be referred to in context with the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks" (June 2, 1988).

### PROPOSAL FORMAT

#### I. Introduction

- A. State the scope of work
- B. Items are omitted that have already been received by this Department

#### II. Site Description

- A. Describe the hydrogeologic setting of the site vicinity
- B. Prepare a vicinity map (including wells located on-site or on adjoining lots, as well as any nearby streams)

#### III. Plan for Determining Extent of Soil Contamination

- A. Describe method for determining the extent of contamination within the excavation
- B. Describe sampling methods and procedures to be used
  1. If a soil gas survey is planned, then:
    - identify number of boreholes, locations, sampling depths, etc.;
    - identify subcontractors, if any;
    - identify analytical methods;
    - provide a quality assurance plan for field testing.
  2. If soil borings are to be used to determine the extent of soil contamination, then:
    - identify number, location (mapped), and depth of the proposed borings;
    - describe the soil classification system, soil sampling method, and rationale;
    - describe the drilling method for the borings, including decontamination procedures;
    - explain how borings will be abandoned.
- C. Describe how clean and contaminated soil will be differentiated, and describe how excavated soil will be stored and disposed of. If on-site soil aeration is to be used, then describe:
  1. The volume and rate of aeration/turning;
  2. The method of containment and cover;
  3. Wet-weather contingency plans;
  4. Results of consultation with the Bay Area Air Quality Management District.

Other on-site treatments (such as bioremediation) require permits issued by the RWQCB. Off-site storage or treatment also requires RWQCB permits.

- D. Describe security measures planned for the excavated hole and contaminated soil

IV. Plan for Characterizing Groundwater Contamination

Construction and placement of wells should adhere to the requirements of the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks."

- A. Explain the proposed locations of monitoring wells (including construction diagrams), and prepare a map to scale
- B. Describe the method of monitoring well construction and associated decontamination procedures
1. Expected depth and diameter of monitoring wells.
  2. Date of expected drilling.
  3. Locations of soil borings and sample collection method.
  4. Casing type, diameter, screen interval, and pack and slot sizing technique.
  5. Depth and type of seal.
  6. Development method and criteria for determining adequate development.
  7. Plans for disposal of cuttings and development water.
  8. Surveying plans for wells (requirements include surveying to established benchmark to 0.01 foot).
- C. Groundwater sampling plans
1. Water level measurement procedure.
  2. Well purging procedures and disposal protocol.
  3. Sample collection and analysis procedures.
  4. Quality assurance plan.
  5. Chain-of-custody procedures.

V. Prepare a Site Safety Plan

**APPENDIX B**  
**DAILY FIELD SUMMARIES**

DAILY FIELD SUMMARY

DATE: May 21, 1990  
Project No.: C9017A  
Client: Certified Environmental Consulting, Inc.  
Site Location: 2555 Saklan Road, Hayward, California

WORK PERFORMED

Drilled to a total depth 30.0-feet and installed Monitor Well MW-5 to a depth of 21.0-feet. Backfilled 21.0-30.0-feet with bentonite pellets. Collected soil samples during drilling using SPT brass retainers. Water first encountered at approximately 14.7-foot depth. No hydrocarbon odors observed during drilling or sampling.

PROBLEMS ENCOUNTERED

Drill site access blocked by vehicles - standby while vehicles removed.

"Sand heave" at TD - used rod bell as load to suppress upload and keep hole open.

Zone 7 inspector Pam Evans could not be contacted for site visit.

Drill rig out of steam-cleaner water; no water on-site - early site departure.

EQUIPMENT ON-SITE

Bay Land Drilling Company CME 75 drill rig with nominal ten (10)-inch OD hollow-stem augers. Bob Rogers, driller. Portable steam cleaner.

SAMPLES COLLECTED

Soil samples collected with a standard penetration test split-spoon sampler nominal two (2)-inch diameter with brass retainers.

Five (5) soil samples from Monitor Well MW-5 collected for analysis at 2.5-3.0 feet, 6.0-6.5 feet, 9.5-10.0 feet, 15.0-15.5 feet, and 19.5-20.0 feet. Selective analysis may be performed.

DAILY FIELD SUMMARY

DATE: May 22, 1990  
Project No.: C9017A  
Client: Certified Environmental Consulting, Inc.  
Site Location: 2555 Saklan Road, Hayward, California

WORK PERFORMED

Completed surface installation of Monitor Well MW-5. Drilled to a total depth of 28.5-feet and installed Monitor Well MW-2 to a depth of 27.0-feet. No hydrocarbon odors observed during drilling or sampling. Collected soil samples during drilling using SPT brass retainers. Water first encountered at approximately 14-foot depth.

PROBLEMS ENCOUNTERED

Drill site initially blocked by vehicles.

Not clarified if monitor well surface seals need visual inspection and approval by Zone 7 - contacted and verified that no on-site inspection is required, although Inspector Pam Evans arrived on-site.

EQUIPMENT ON-SITE

Bay Land Drilling Company CME 75 drill rig with nominal ten (10)-inch OD hollow-stem augers. Bob Rogers, driller. Portable steam cleaner.

SAMPLES COLLECTED

Soil samples collected with a standard penetration test split-spoon sampler nominal two (2)-inch diameter with brass retainers.

Five (5) soil samples collected from Monitor Well MW-2 for analysis at 3.5-4.0 feet, 6.0-6.5 feet, 11.0-11.5 feet, 16.0-16.5 feet, and 21.0-21.5 feet. Selective analysis may be performed.

DAILY FIELD SUMMARY

<p><u>DATE:</u> May 23, 1990 <u>Project No.:</u> C9017A <u>Client:</u> Certified Environmental Consulting, Inc. <u>Site Location:</u> 2555 Saklan Road, Hayward, California</p>
---

WORK PERFORMED

Drilled to a total depth 27.5-feet and installed Monitor Well MW-4 to a depth of 27.2-feet. Collected soil samples during drilling using SPT brass retainers. Water first encountered at approximately 16-feet depth. No hydrocarbon odors observed during drilling or sampling.

Drilled to a total depth 28.5-feet and installed Monitor Well MW-1 to a depth of 25.3-feet. Collected soil samples during drilling using SPT brass retainers. Water first encountered at approximately 14-feet depth. No hydrocarbon odors observed during drilling or sampling.

PROBLEMS ENCOUNTERED

Drill sites initially blocked by vehicles.

Berkeley Land Co. representative identified two (2) existing monitor wells. One well is located within apparent public right-of-way (near Middle Lane), and does not contain cap identification as a monitor well nor a security cover. Notified Berkeley Land Co. and Project Geologist Scott Parker that it is our opinion the monitor well does not fulfill current regulations for investigations of underground storage tanks.

EQUIPMENT ON-SITE

Bay Land Drilling Company CME 75 drill rig with nominal ten (10)-inch or eight (8)-inch OD hollow-stem augers. Bob Rogers, driller. Portable steam cleaner.

Daily Field Summary - continued

May 23, 1990

Page 2 of 2

SAMPLES COLLECTED

Soil samples collected with a standard penetration test split-spoon sampler nominal two (2)-inch diameter with brass retainers.

Five (5) soil samples from Monitor Well MW-4 collected for analysis at 3.5-4.0 feet, 6.0-6.5 feet, 11.0-11.5 feet, 16.0-16.5 feet, and 21.0-21.5 feet. Selective analysis may be performed.

Five (5) soil samples from Monitor Well MW-1 collected for analysis at 3.5-4.0 feet, 6.0-6.5 feet, 11.0-11.5 feet, 16.0-16.5 feet, and 21.0-21.5. Selective analysis may be performed.

DAILY FIELD SUMMARY

DATE: May 24, 1990

Project No.: C9017A

Client: Certified Environmental Consulting, Inc.

Site Location: 2555 Saklan Road, Hayward, California

WORK PERFORMED

Drilled Boring B-1 to a total depth of 15.0-feet. Collected soil samples during drilling using SPT brass retainers. Water first encountered at approximately 14.9-feet depth. No hydrocarbon odors observed during drilling or sampling.

Drilled Boring B-3 to a total depth of 14.5-feet. Collected soil samples during drilling using SPT brass retainers. Water first encountered at approximately 14.3-feet depth. No hydrocarbon odors observed during drilling or sampling.

PROBLEMS ENCOUNTERED

CME drill rig 75 could not gain access to site for Monitor Well MW-3 because vehicles blocking entry. Early site departure to re-mobilize smaller drill rig at a later date.

EQUIPMENT ON-SITE

Bay Land Drilling Company CME 75 drill rig with nominal eight (8)-inch OD hollow-stem augers. Bob Rogers, driller. Portable steam cleaner.

SAMPLES COLLECTED

Soil samples collected with a standard penetration test split-spoon sampler nominal two (2)-inch diameter with brass retainers.

Four (4) soil samples from Boring B-1 collected for analysis at 3.5-4.0 feet, 6.0-6.5 feet, 9.5-10.0 feet, and 14.5-15.0 feet. Selective analysis may be performed.

Three (3) soil samples from Boring B-3 collected for analysis at 4.0-4.5 feet, 9.0-9.5 feet, and 14.0-14.5 feet. Selective analysis may be performed.



DAILY FIELD SUMMARY

<p><u>DATE:</u> May 30, 1990 <u>Project No.:</u> C9017A <u>Client:</u> Certified Environmental Consulting, Inc. <u>Site Location:</u> 2555 Saklan Road, Hayward, California</p>
---

WORK PERFORMED

Drilled to a total depth of 25.0-feet and installed Monitor Well MW-3 to a depth of 20.3-feet. Backfilled 20.5-25.0 feet depth with bentonite pellets. Hydrocarbon odors and sheen observed during sampling from approximately 13.0 to 16.1-foot depth. Collected continuous soil samples during drilling using split barrel. Water first encountered at approximately 14.8-foot depth.

Drilled Boring B-2 to a total depth of 10.0-feet. Collected soil samples during drilling using SPT brass retainers. Water not encountered. No hydrocarbon odors observed during drilling or sampling.

Drilled Boring B-4 to a total depth of 15.0-feet. Collected soil samples during drilling using SPT brass retainers. Water first encountered at approximately 14.4-foot depth. No hydrocarbon odors observed during drilling or sampling.

PROBLEMS ENCOUNTERED

Drill site B-2 initially blocked by vehicle.

Drill rig mechanical breakdown (hydraulic line) while drilling Boring B-2. Will re-mobilize at a later date after repairs. Need to finish drilling Boring B-2 from 10.0-feet to 15.0-feet.

Split spoon sampler from 3.5 to 5.0 feet in Boring B-2 had no recovery.

EQUIPMENT ON-SITE

Bay Land Drilling Company CME 55 drill rig with nominal eight (8) and ten (10)-inch OD hollow-stem augers. John Richardson, driller. Portable steam cleaner.

Daily Field Summary - continued  
May 30, 1990  
Page 2 of 2

SAMPLES COLLECTED

Soil samples collected with a standard penetration test split-spoon sampler nominal two (2)-inch diameter with brass retainers.

Four (4) soil samples collected from Monitor Well MW-3 for analysis at 6.0-6.5 feet, 9.5-10.0 feet, 14.5-15.0 feet, and 19.5-20.0 feet. Selective analysis may be performed.

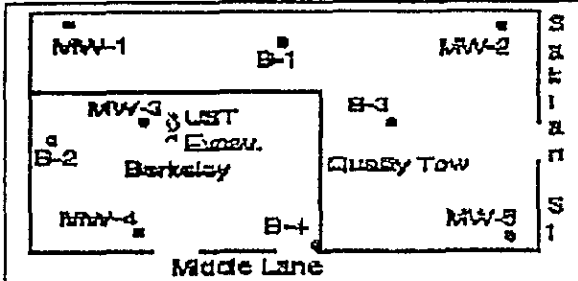
Three (3) soil samples from Boring B-4 collected for analysis at 4.5-5.0 feet, 9.5-10.0 feet, and 14.5-15.0 feet. Selective analysis may be performed.

One (1) soil sample from Boring B-2 collected for analysis at 9.5-10.0 feet.

**APPENDIX C**  
**BORING LOGS**

KENT & KENT, INC.  
Walnut Creek, California

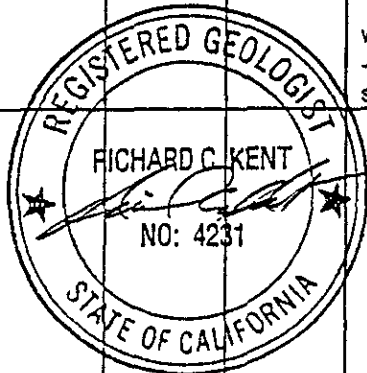
LOCATION SKETCH MAP:



Project No./Name: C9017A/CEC-Berkeley Land Co.	Client: Certified Env. Consulting
Project Location: 23555 Saklan St., Hayward, CA	Drill Hole No.: B-1
Drilling Co./Foreman: Bay Land Drilling/Bob Rogers	Geologist: R. Kent/S. Parker
Drilling Method/C57/Rig: 8" OD HSA/CME 75	Sampling Method(s): 2" SPT Brass Retainer

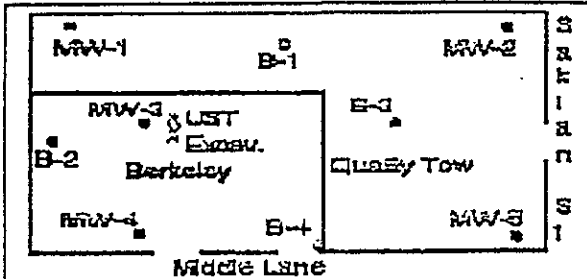
Drilling Start Date/Time: 5/24/90 08:30	Drilling End Date/Time: 5/24/90 09:45	Elevation: NA	Total Depth: 15.0 feet	Surface Conditions: 2" asphalt	Samples: 4 soil
Depth 1st Water Data/Time: 14.5 feet, 5/24/90 08:55	Geophys. Logs: NA	Sec-Tws-Rng NA	Laboratory: Superior	C-O-C Number: NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1					CL-ML	Clayey SILT				
2										
3		5								
4	S-1	10	08:30	none	CL	Silty CLAY	very stiff	gray brown	moist	
5		4			SC	Clayey SAND	medium dense	yellow-brown		
6	S-2	9	08:40	none	GP-GC	Clayey-Sand GRAVEL				
7										
8					SC	Clayey SAND	loose			
9		3								
10	S-3	4	08:50	none						decreasing clay content
11										
12										
13										
14		2			SW-SC				wet	well graded, clayey sand
15	S-4	3	09:00	none					—?— saturated	
16				TD =	15 Ft					backfilled with cement grout to the surface
17										
18										
19										
20										



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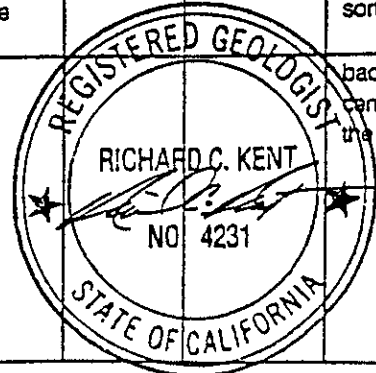
LOCATION SKETCH MAP:



Project No./Name: C9017A/CEC-Berkeley Land Co.	Client: Certified Env. Consulting
Project Location: 23555 Saklan St., Hayward, CA	Drill Hole No.: B-2
Drilling Co./Foreman: Bay Land Drilling/John Richardson	Geologist: R. Kent/S. Parker
Drilling Method/C57/Rig: 8" OD HSA/CME 55	Sampling Method(s): 2" SPT Brass Retainer

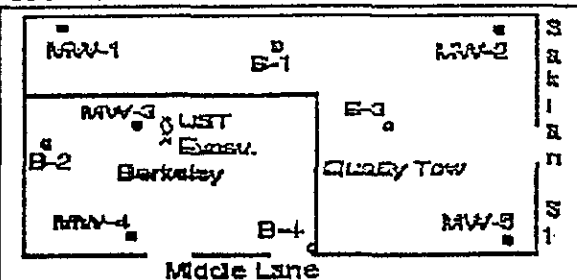
Drilling Start Date/Time: 5/30/90 16:10	Drilling End Date/Time: 6/4/90 08:45	Elevation: NA	Total Depth: 15.0 feet	Surface Conditions: 18" cement pad	Samples: 2 soil
Depth 1st Water Date/Time: 14.5 feet, 6/4/90 08:30	Geophys. Logs: NA	Sec-Tws-Rng NA	Laboratory: Superior	C-O-C Number: NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1										
2					ML	Clayey SILT		black-dk gray	moist	cement clog in sampler
3										NR = not recovered
4	NR		16:25		—?—	—?—	—?—	—?—		
5										
6										
7										
8										
9		5			SC	Clayey SAND	medium dense	greenish gray		decreasing clay content
10	S-1	6	16:45	ncne				—?—		slightly clayey
11								yel-brown		rig hydraulic line broke
12								—?—		drilled 10.0-15.0 on 6/4/90
13								olive gray		
14		3								minor clay, sand well sorted
15	S-2	5	08:35	mod - strong			loose			
16				TD =	15 Ft					backfilled with cement grout to the surface
17										
18										
19										
20										



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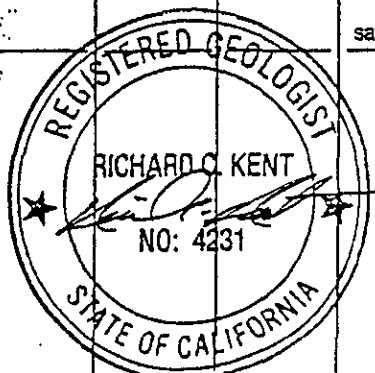
LOCATION SKETCH MAP:



Project No./Name: C9017A/CEC-Berkeley Land Co.	Client: Certified Env. Consulting
Project Location: 23555 Saklan St., Hayward, CA	Drill Hole No.: B-3
Drilling Co./Foreman: Bay Land Drilling/Bob Rogers	Geologist: R. Kent/S. Parker
Drilling Method/C57/Rig: 8" OD HSA/CME 75	Sampling Method(s): 2" SPT Brass Retainer

Drilling Start Date/Time: 5/24/90 10:00	Drilling End Date/Time: 5/24/90 10:45	Elevation: NA	Total Depth: 14.5 feet	Surface Conditions: 2" asphalt	Samples: 3 soil
Depth 1st Water Date/Time: 14.3 feet, 5/24/90 10:30	Geochys. Logs: NA	Sec-Tws-Rng NA	Laboratory: Superior	C-O-C Number: NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1										
2										
3										
4	S-1	4 4 8	10:10	none	CL	Silty CLAY	stiff	grayish brown	moist	
5					—?—	—?—	—?—	—?—	—?—	
6										
7										
8	S-2	5 6 6	10:24	none	SC	Clayey SAND	medium dense	yellowish brown	damp	moderate - well graded sand
9										
10										
11										
12										
13									—?— wet	
14	S-3	2 2 3	10:31	none					—?— saturated	slight increase clay content
15										
16					TD = 14.5 Ft					backfilled with cement grout to the surface
17										
18										
19										
20										

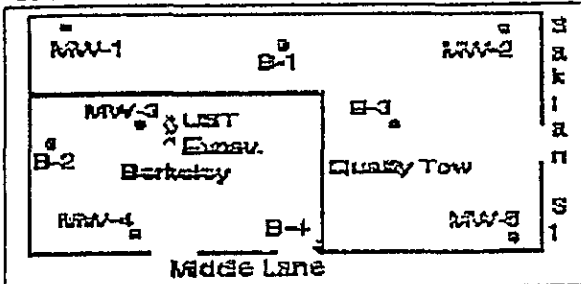


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GEOLOGIC LOG  
SHEET 1 of 1

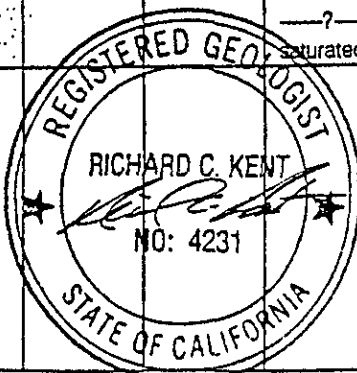
LOCATION SKETCH MAP:



<u>Project No./Name:</u> C9017A/CEC-Berkeley Land Co.	<u>Client:</u> Certified Env. Consulting
<u>Project Location:</u> 23555 Saklan St., Hayward, CA	<u>Drill Hole No.:</u> B-4
<u>Drilling Co./Foreman:</u> Bay Land Drilling/John Richardson	<u>Geologist:</u> R. Kent/S. Parker
<u>Drilling Method/CS7/Rig:</u> 8" OD HSA/CME 55	<u>Sampling Method(s):</u> 2" SPT Brass Retainer

<u>Drilling Start Date/Time:</u> 5/30/90 15:25	<u>Drilling End Date/Time:</u> 5/30/90 15:55	<u>Elevation:</u> NA	<u>Total Depth:</u> 15.0 feet	<u>Surface Conditions:</u> 10" cement pad	<u>Samples:</u> 3 soil
<u>Depth 1st Water Date/Time:</u> 14.4 feet, 5/30/90 15:50	<u>Geophys. Locs:</u> NA	<u>Sac-Tws-Rng</u> NA	<u>Laboratory:</u> Superior	<u>C-O-C Number:</u> NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1										
2					ML	Clayey SILT	stiff	very dark brown	moist	
3										
4		5						—?—		
5	S-1	10	15:30	none	—?—	—?—	—?—	gry-brwn		
6		11						—?—		
7					SC	Clayey SAND	medium dense	yellow brown		
8					—?—	—?—				
9		3								significant decrease clay content
10	S-2	5	15:40	none	SM	Silty SAND				
11		8								
12										
13										
14		3			—?—				—?—	abundant coarse sand, clayey gravel
15	S-3	4	15:55	none	GP-SC	GRAVEL			wet	
		5			SC	Cly SAND			—?—	
									saturated	
16										backfilled with cement grout to the surface
17										
18										
19										
20										

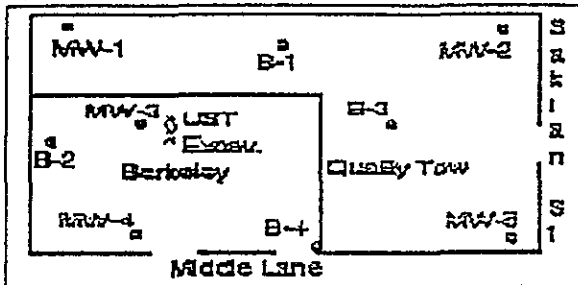


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## GEOLOGIC LOG SHEET 1 of 2

LOCATION SKETCH MAP:



<u>Project No./Name:</u> C9017A/CEC-Berkeley Land Co.	<u>Client:</u> Certified Env. Consulting
<u>Project Location:</u> 23555 Saklan St., Hayward, CA	<u>Drill Hole No.:</u> MW-1
<u>Drilling Co./Foreman:</u> Bay Land Drilling/ Bob Rogers	<u>Geologist:</u> R. Kent/S. Parker
<u>Drilling Method/C57/Rig:</u> 10" OD HSA/CME 75	<u>Sampling Method(s):</u> 2" SPT Brass Retainer

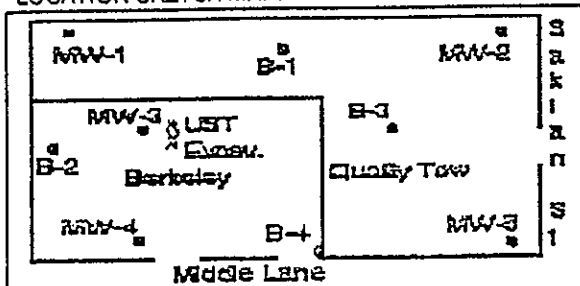
<u>Drilling Start Date/Time:</u> 5/23/90 12:00	<u>Drilling End Date/Time:</u> 5/23/90 15:00	<u>Elevation:</u> NA	<u>Total Depth:</u> 28.5 feet	<u>Surface Conditions:</u> 2" asphalt/cement	<u>Samples:</u> 5 soil
<u>Depth 1st Water Date/Time:</u> 14 (?) feet, 5/23/90 13:40	<u>Geohvs. Logs:</u> NA	<u>Sec-Tws-Rng</u> NA	<u>Laboratory:</u> Superior	<u>C-O-C Number:</u> NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1						Silty CLAY	very stiff	black	moist	fill?
2					CL					
3		5			—?—	—?—		—?—		
4	S-1	11	13:00	none	ML	Clayey SILT		gry - brn		
5		7			—?—	—?—		—?—		
6	S-2	9	13:15	none	SM	Silty fine SAND	medium dense	light yel brown	damp	
7		7			—?—	—?—				
8					—?—	—?—				
9										increasing clay content
10		3			SC	Clayey SAND	loose			
11	S-3	4								
12		6	13:30	none		to Silty fine SAND				
13										
14										
15		6								
16	S-4	4								
17		5	13:45	none						
18										
19					—?—	—?—		—?—	—?—	
20					ML	Clayey SILT	very stiff	medium brown	moist	



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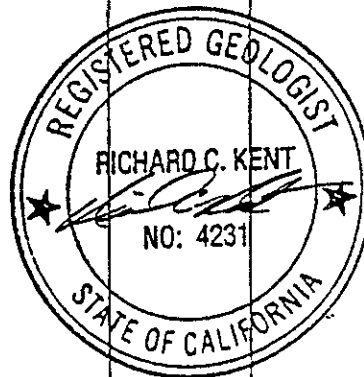
LOCATION SKETCH MAP:



<u>Project No./Name:</u> C9017A/CEC-Berkeley Land Co.	<u>Client:</u> Certified Env. Consulting
<u>Project Location:</u> 23555 Saklan St., Hayward, CA	<u>Drill Hole No.:</u> MW-1
<u>Drilling Co./Foreman:</u> Bay Land Drilling/Bob Rogers	<u>Geologist:</u> R. Kent/S. Parker
<u>Drilling Method/C57/Rig:</u> 10" OD HSA/CME 75	<u>Sampling Method(s):</u> 2" SPT Brass Retainer

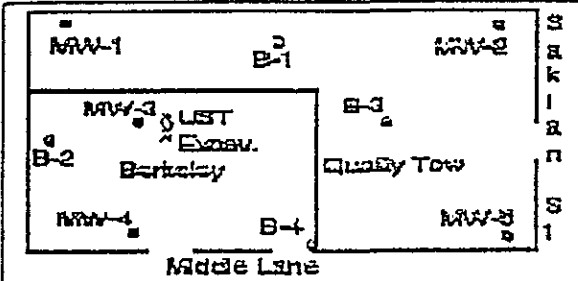
<u>Drilling Start Date/Time:</u> 5/23/90 12:00	<u>Drilling End Date/Time:</u> 5/23/90 15:00	<u>Elevation:</u> NA	<u>Total Depth:</u> 28.5 feet	<u>Surface Conditions:</u> 2" asphalt/cement	<u>Samples:</u> 5 soil
<u>Depth 1st Water Date/Time:</u> 14 (?) feet, 5/23/90 13:40	<u>Geohvs. Logs:</u> NA	<u>Sec-Tws-Rng</u> NA	<u>Laboratory:</u> Superior	<u>C-O-C Number:</u> NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
21	S-5	4 6 11	14:00	none	ML	Clayey SILT	very stiff	medium brown	moist	(unit continued from prior sheet)
22										
23										
24										14:30, W.L. at 16.5 Ft
25										
26										
27										
28										
29	visual		14:45	none						backfilled with bentonite from 28.5 to 25.3 ft; installed well
30						TD =	28.5 Ft			
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										



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LOCATION SKETCH MAP:



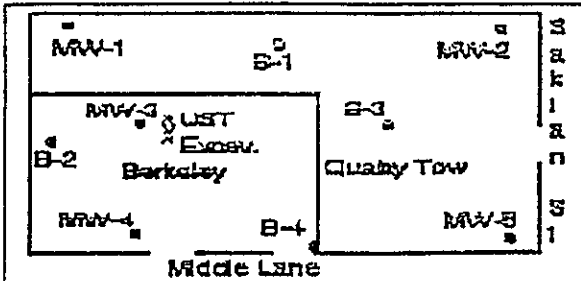
<u>Project No./Name:</u> C9017A/CEC-Berkeley Land Co.	<u>Client:</u> Certified Env. Consulting
<u>Project Location:</u> 23555 Saklan St., Hayward, CA	<u>Drill Hole No.:</u> MW-2
<u>Drilling Co./Foreman:</u> Bay Land Drilling/Bob Parker	<u>Geologist:</u> R. Kent/S. Parker
<u>Drilling Method/C57/Ric:</u> 10" OD HSA/CME 75	<u>Sampling Method(s):</u> 2" SPT Brass Retainer

<u>Drilling Start Date/Time:</u> 5/22/90 09:45	<u>Drilling End Date/Time:</u> 5/22/90 12:00	<u>Elevation:</u> NA	<u>Total Depth:</u> 30.0 feet	<u>Surface Conditions:</u> 2" asphalt	<u>Samcies:</u> 5 soil
<u>Depth 1st Water Date:</u> 13.5 (?) feet, 5/22/90	<u>Geophys. Logs:</u> NA	<u>Sec-Tws-Rng</u> NA	<u>Laboratory:</u> Superior	<u>C-O-C Number:</u> NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1					CL	CLAY	very stiff	dark brown	damp	mod. organic content
2										
3		10			—?—	—?—	—?—	—?—		
4	S-1	13	10:07	none						
5					SM	Silty SAND	medium dense	yellowish brown	—?—	sand unsorted to poorly sorted moderate silt content
6		8							moist	
7	S-2	11	10:14	none						
8		8			—?—	—?—		—?—		
9					SC	Clayey SAND		v. light gray		
10					—?—	—?—		—?—		
11		6			SM	Silty SAND		yellowish brown		slight increase clay content
12	S-3	7	10:30	none						
13		8			—?—	—?—	—?—		—?—	
14									wet	vuggy appearance moderate silt
15									—?—	
16		2			SC	Clayey SAND	loose			
17	S-4	3	10:46	none					saturated	slightly silty
18		3								
19										increasing clay content
20					—?—	—?—	—?—	—?—	—?—	unit change approx. 20-feet

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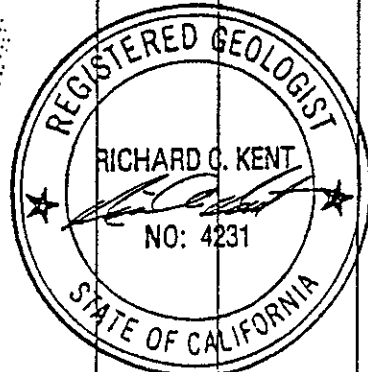
LOCATION SKETCH MAP:



Project No./Name: C9017A/CEC-Berkeley Land Co.	Client: Certified Env. Consulting
Project Location: 23555 Saklan St., Hayward, CA	Drill Hole No.: MW-2
Drilling Co./Foreman: Bay Land Drilling/Bob Parker	Geologist: R. Kent/S. Parker
Drilling Method/C57/Rig: 10" OD HSA/CME 75	Sampling Method(s): 2" SPT Brass Retainer

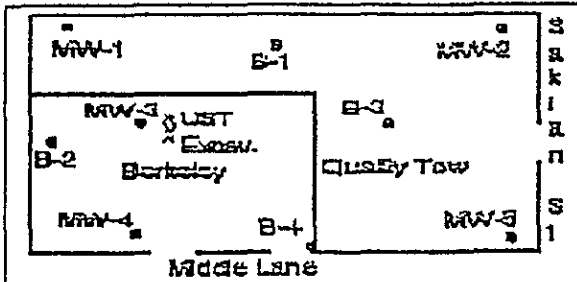
Drilling Start Date/Time: 5/22/90 09:45	Drilling End Date/Time: 5/22/90 12:00	Elevation: NA	Total Depth: 30.0 feet	Surface Conditions: 2" asphalt	Samcies: 5 soil
Depth 1st Water Date: 13.5 (?) feet, 5/22/90	Geophys. Logs: NA	Sec-Tws-Rng NA	Laboratory: Superior	C-O-C Number: NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
21	S-5	5 8 10	11:00	none	CL	Sandy CLAY	very stiff	medium gray	moist	moderately silty
22					SC	Clay SAND	loose?	yel-brwn	wet?	Clayey SAND interbeds?, approx. 4-6" thick sand heave
23					CL-CH	Sandy CLAY	very stiff	medium gray	moist	mod. plastic
24					SC	Clay SAND	loose?	yel-brwn	wet?	11:25, W.L. at 18.0 Ft
25					CL	Sandy CLAY	very stiff	medium gray	moist	
26										
27										
28	visual	3 7 10	11:55	none	CL	Sandy CLAY	very stiff	medium gray	moist	
29										
30										
31					TD =	30.0 Ft				backfilled with bentonite from 30.0 to 27.5 ft; installed well
32										
33										
34										
35										
36										
37										
38										
39										
40										



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LOCATION SKETCH MAP:



Project No./Name: C9017A/CEC-Berkeley Land Co.	Client: Certified Env. Consulting
Project Location: 23555 Saklan St., Hayward, CA	Drill Hole No.: MW-3
Drilling Co./Foreman: Bay Land Drilling/John Richardson	Geologist: R. Kent/S. Parker
Drilling Method/C57/Rig: 10" OD (ream) HSA/CME 53	Sampling Method(s): 2" SPT Brass Ret.; continuous

Drilling Start Date/Time: 5/30/90 08:00	Drilling End Date/Time: 5/30/90 10:45	Elevation: NA	Total Depth: 25.0 feet	Surface Conditions: 18" cement	Samples: 4 soil
Depth 1st Water Date/Time: 14.8 feet, 5/30/90 10:00	Geochys. Logs: NA	Sec-Tws-Rng: NA	Laboratory: Superior	C-O-C Number: NA	

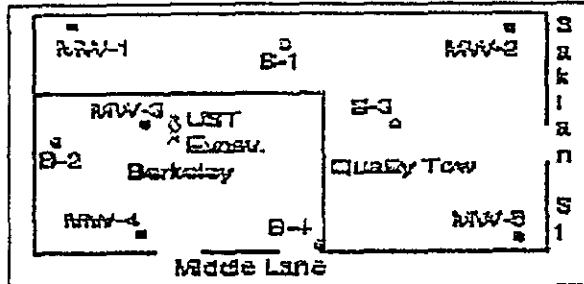
DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1								dark gray		
2					CL	CLAY	very stiff		moist	slightly silty mod. plastic
3										
4								—?— olive gray		
5		9								
6	S-1	11								
7		17	08:55	none	SW	SAND	loose	yellowish brown	damp	well sorted; very little clay
8					GP-GM	Sandy GRAVEL				<10% fines
9		3								
10	S-2	3			SW	SAND				
11		5	09:30	none						
12					SC	Clayey SAND				12.3' - increase in sand size
13					—?— SC-SW	—?— Cse Clay SAND				13.0 - begin soil contamination
14				mod strong				grayish olive		
15	S-3	3			—?—	—?—				
16		5	10:00	very strong	SC	Clay SAND			saturated	rainbow sheen on free water
17										
18										
19		5			CL	CLAY	stiff	yellowish brown	moist	mottled white and dark brown w/ angular blebs
20	S-4	6								
		7	10:15	none				—?—		

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## GEOLOGIC LOG SHEET 2 of 2

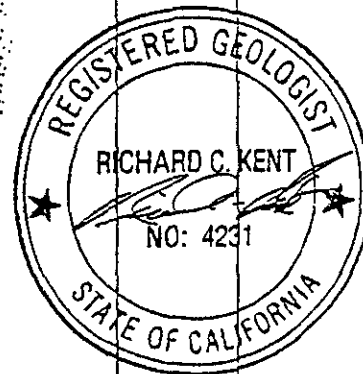
LOCATION SKETCH MAP:



<u>Project No./Name:</u> C9017A/CEC-Berkeley Land Co.	<u>Client:</u> Certified Env. Consulting
<u>Project Location:</u> 23555 Saklan St., Hayward, CA	<u>Drill Hole No.:</u> MW-3
<u>Drilling Co./Foreman:</u> Bay Land Drilling/John Richardson	<u>Geologist:</u> R. Kent/S. Parker
<u>Drilling Method/C57/Rig:</u> 10" OD (ream) HSA/CME 55	<u>Sampling Method(s):</u> 2" SPT Brass Ret.; continuous

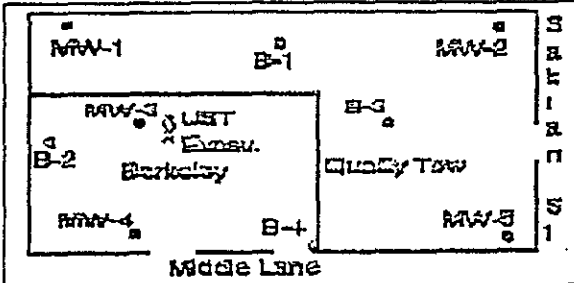
<u>Drilling Start Date/Time:</u> 5/30/90 08:00	<u>Drilling End Date/Time:</u> 5/30/90 10:45	<u>Elevation:</u> NA	<u>Total Depth:</u> 25.0 feet	<u>Surface Conditions:</u> 18" cement	<u>Samples:</u> 4 soil
<u>Depth 1st Water Date/Time:</u> 14.8 feet, 5/30/90 10:00	<u>Geochys. Logs:</u> NA	<u>Sec-Tws-Rng</u> NA	<u>Laboratory:</u> Superior	<u>C-O-C Number:</u> NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
21								olive gray		unit change at 21.1 ft.
22										
23										
24		3			SC	Clayey SAND	loose	yellowish brown	moist	mottled
25	visual	3 5	10:45	none						
26					TD =	25.0 Ft				backfilled with bentonite from 25.0 to 20.5 ft; installed well
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										



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LOCATION SKETCH MAP:



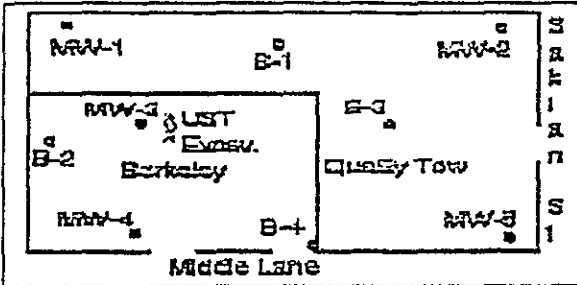
Project No./Name: CG017A/CEC-Berkeley Land Co.	Client: Certified Env. Consulting
Project Location: 23555 Saklan St., Hayward, CA	Drill Hole No.: MW-4
Drilling Co./Foreman: Bay Land Drilling/Bob Rogers	Geologist: R. Kent/S. Parker
Drilling Method/CS7/Rig: 10" OD HSA/CME 75	Sampling Method(s): 2" SPT Brass Retainer

Drilling Start Date/Time: 5/23/90 07:15	Drilling End Date/Time: 5/23/90 09:20	Elevation: NA	Total Depth: 27.5 feet	Surface Conditions: 14" cement	Samples: 5 soil
Depth 1st Water Date/Time: 16 (?) feet, 5/23/90 09:45	Geophys. Logs: NA	Sec-Tws-Rng NA	Laboratory: Superior	C-O-C Number: NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Oder	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1						SILT		black	moist	asphaltic material under cement
2						—?—		—?—		
3		2								
4	S-1	4 7	07:45	none	ML	Clayey SILT	medium stiff	dark brown		
5						—?—		—?—	—?—	
6	S-2	5 8	08:00	none	SW-SC	silty-clayey SAND	medium dense	black yellow brown		moderate clay mod-poorly sorted
7										
8										
9										
10										
11	S-3	3 5 7	08:17	none						decrease clay content
12									—?—	
13									wet	
14										
15					—?—	—?—	—?—	—?—	—?—	
16	S-4	5 5 4	08:31	none	SP-SM	Cse Sand w/GRAVEL	loose	medium brown	saturated	
17					—?—	—?—	—?—	—?—	—?—	
18										
19					CL	fn sandy CLAY	medium stiff	lt yellow brown	wet - moist	med. plastic slight silty
20								gry-brwn	—?—	

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Walnut Creek, California

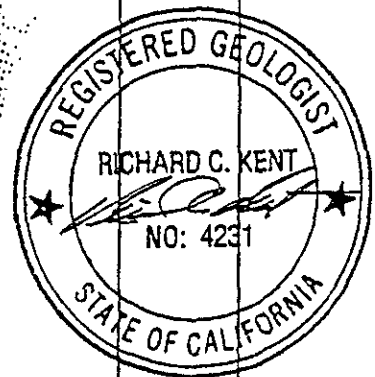
LOCATION SKETCH MAP:



<u>Project No./Name:</u> C9017A/CEC-Berkeley Land Co.	<u>Client:</u> Certified Env. Consulting
<u>Project Location:</u> 23555 Saklan St., Hayward, CA	<u>Drill Hole No.:</u> MW-4
<u>Drilling Co./Foreman:</u> Bay Land Drilling/Bob Rogers	<u>Geologist:</u> R. Kent/S. Parker
<u>Drilling Method/C57/Rig:</u> 10" OD HSA/CME 75	<u>Sampling Method(s):</u> 2" SPT Brass Retainer

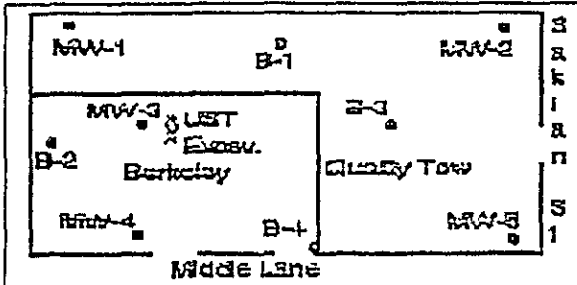
<u>Drilling Start Date/Time:</u> 5/23/90 07:15	<u>Drilling End Date/Time:</u> 5/23/90 09:20	<u>Elevation:</u> NA	<u>Total Depth:</u> 27.5 feet	<u>Surface Conditions:</u> 14" cement	<u>Samples:</u> 5 soil
<u>Depth 1st Water Date/Time:</u> 16 (?) feet, 5/23/90 09:45	<u>Geochys. Logs:</u> NA	<u>Sec-Tws-Rng</u> NA	<u>Laboratory:</u> Superior	<u>C-O-C Number:</u> NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
21		4						—?—		
22	S-5	4	09:02	none	CL-CH	silty CLAY		yellowish brown	moist	med - high plastic
28					TD =	27.5 Ft				installed well
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										



KENT & KENT, INC.  
Walnut Creek, California

LOCATION SKETCH MAP:



<u>Project No./Name:</u> C9017A/CEC-Berkeley Land Co.	<u>Client:</u> Certified Env. Consulting
<u>Project Location:</u> 23555 Saklan St., Hayward, CA	<u>Drill Hole No.:</u> MW-5
<u>Drilling Co./Foreman:</u> Bay Land Drilling/Bob Rogers	<u>Geologist:</u> R. Kent/S. Parker
<u>Drilling Method/C57/Rig:</u> 10" OD HSA/CME 75	<u>Sampling Method(s):</u> 2" SPT Brass Retainer

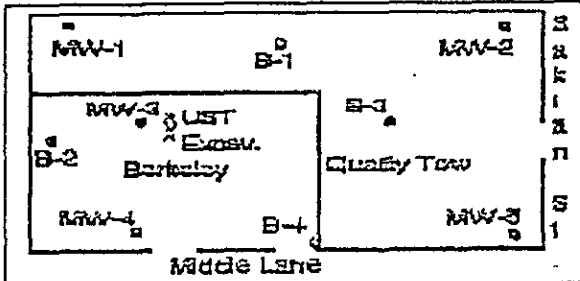
<u>Drilling Start Date/Time:</u> 5/21/90 09:30	<u>Drilling End Date/Time:</u> 5/21/90 12:00	<u>Elevation:</u> NA	<u>Total Depth:</u> 31.5 feet	<u>Surface Conditions:</u> 2" asphalt	<u>Samcies:</u> 5 soil
<u>Depth 1st Water Date/Time:</u> 14.7 feet, 5/21/90 11:30	<u>Geophys. Logs:</u> NA	<u>Sec-Tws-Rng</u> NA	<u>Laboratory:</u> Superior	<u>C-O-C Number:</u> NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1						Sand		dark brown		
2		7								
3	S-1	15	10:00	none	—?—	—?—	—?—	—?—		
4										
5		12								
6	S-2	12	10:12	none						
7		7			SC	Clayey SAND	medium dense	yellow brown	moist	fine grained
8										
9		4								
10	S-3	7	10:33	none						
11										
12										
13					—?—	—?—	—?—			
14									—?—	
15	S-4	3	10:55	none	SC	Clayey SAND to Sandy CLAY	medium dense to very stiff		saturated	
16		2								
17		3								
18										
19		5			—?—	—?—	—?—		—?—	
20	S-5	8	11:20	none	CL	CLAY	very stiff		moist	



KENT & KENT, INC.  
Walnut Creek, California

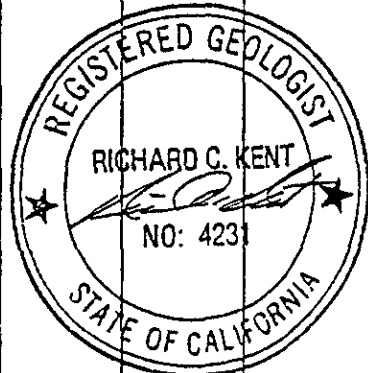
LOCATION SKETCH MAP:



<u>Project No./Name:</u> C9017A/CEC-Berkeley Land Co.	<u>Client:</u> Certified Env. Consulting
<u>Project Location:</u> 23555 Saklan St., Hayward, CA	<u>Drill Hole No.:</u> MW-5
<u>Drilling Co./Foreman:</u> Bay Land Drilling/ Bob Rogers	<u>Geologist:</u> R. Kent/S. Parker
<u>Drilling Method/C57/Rig:</u> 10" OD HSA/CME 75	<u>Sampling Method(s):</u> 2" SPT Brass Retainer

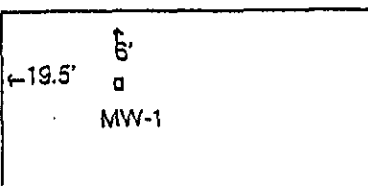
<u>Drilling Start Date/Time:</u> 5/21/90 09:30	<u>Drilling End Date/Time:</u> 5/21/90 12:00	<u>Elevation:</u> NA	<u>Total Depth:</u> 31.5 feet	<u>Surface Conditions:</u> 2" asphalt	<u>Samples:</u> 5 soil
<u>Depth 1st Water Date/Time:</u> 14.7 feet, 5/21/90 11:30	<u>Geochys. Logs:</u> NA	<u>Sec-Tws-Rng:</u> NA	<u>Laboratory:</u> Superior	<u>C-O-C Number:</u> NA	

DEPTH (feet)	SAMPLE NO.	SPT	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
21										
22					CL	CLAY	very stiff	yellow brown	moist	
23										
24										
25										
26										
27										
28										
29										
30										
31	visual		12:00	none						
32					TD =	31.5 Ft				
33										backfill with bentonite from 31.5 to 21.2; installed well
34										
35										
36										
37										
38										
39										
40										

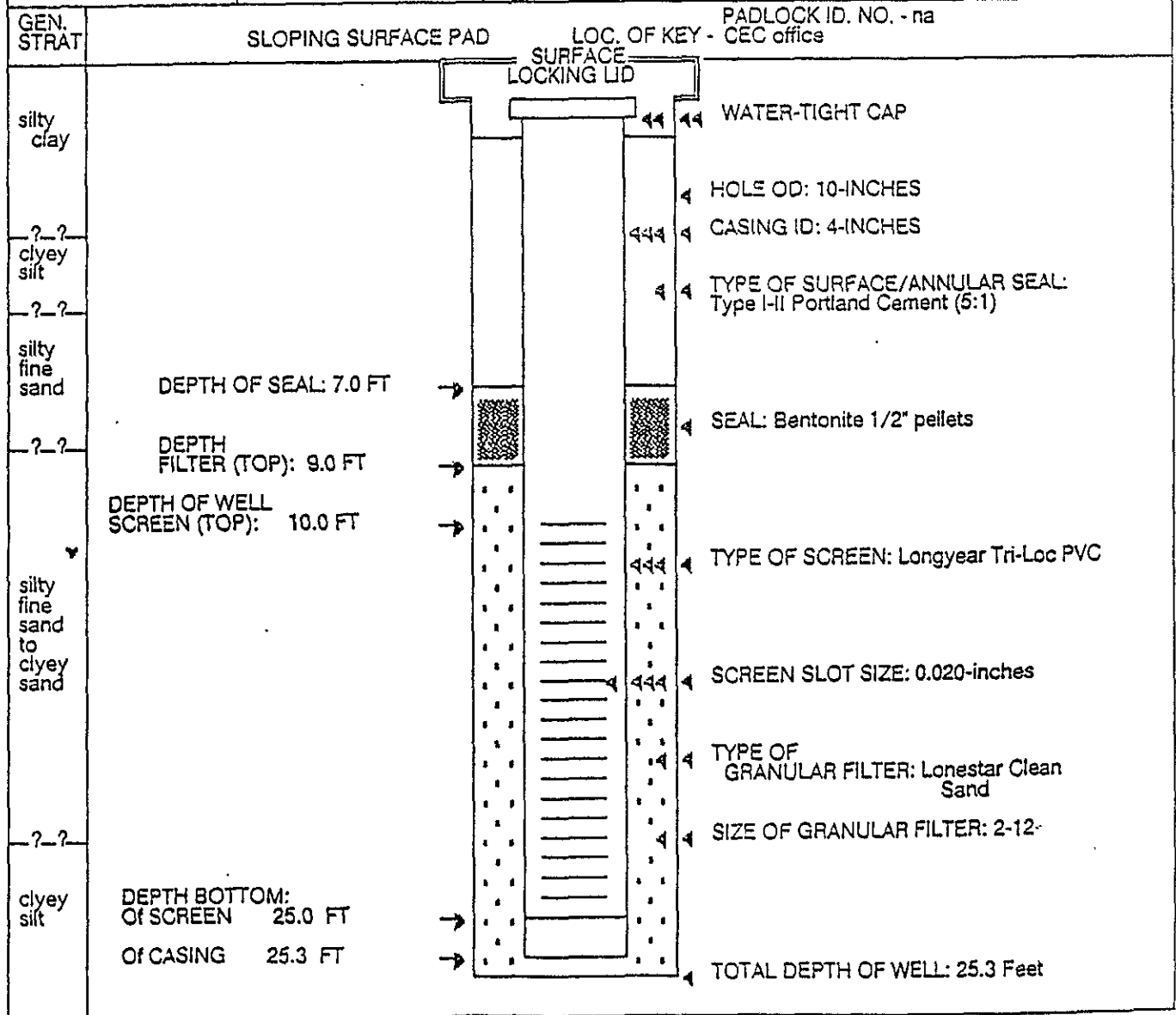


**APPENDIX D**

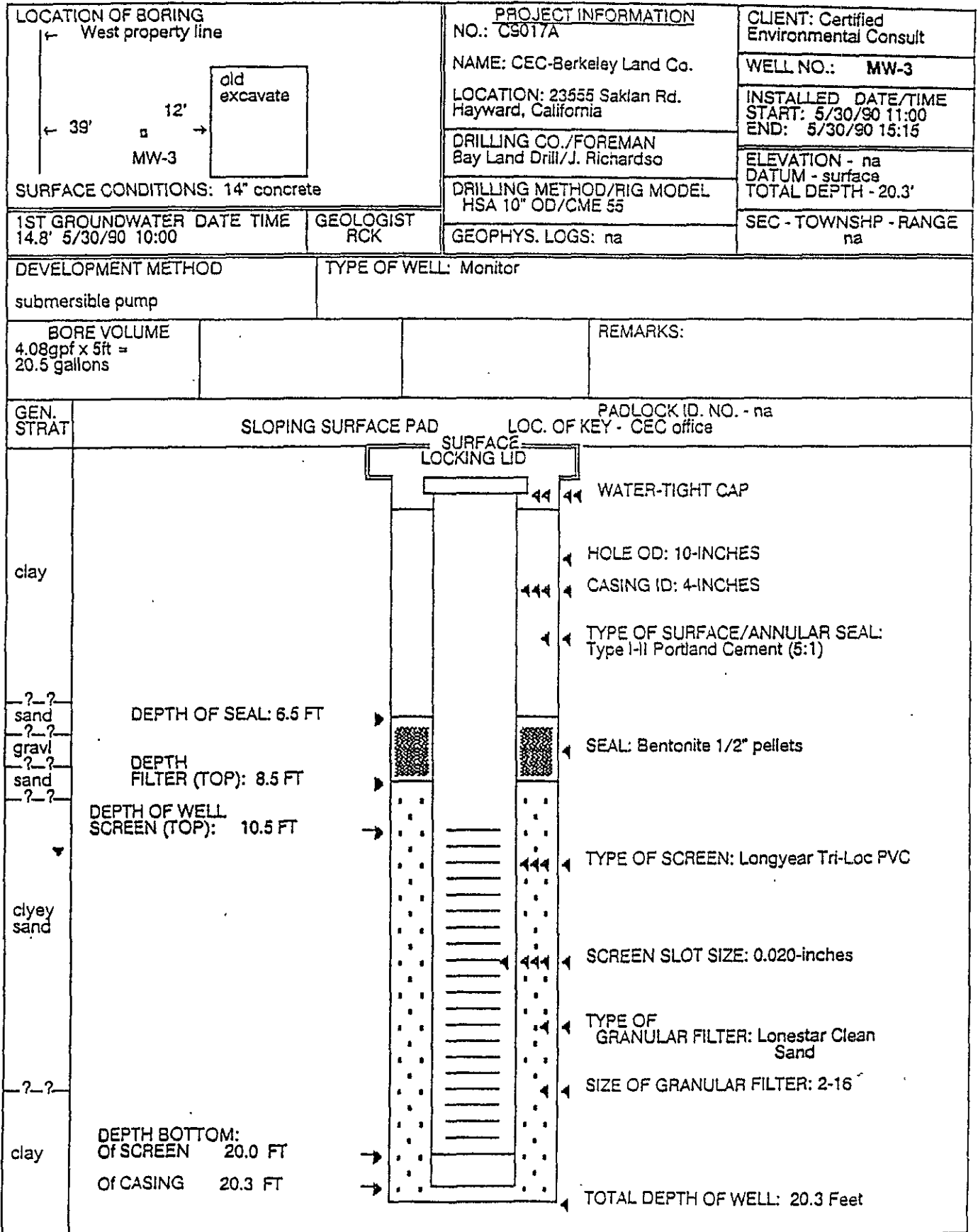
**MONITOR WELL AS-BUILT SKETCHES**

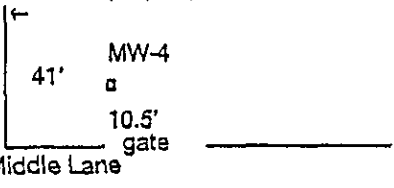
<b>LOCATION OF BORING</b> Northwest Corner 		<b>PROJECT INFORMATION</b> NO.: CS017A NAME: CEC-Berkeley Land Co. LOCATION: 23555 Sakian Rd. Hayward, California DRILLING CO./FOREMAN: Bay Land Drill/Bob Rogers DRILLING METHOD/RIG MODEL: HSA 10" OD/CME 75 GEOPHYS. LOGS: na		CLIENT: Certified Environmental Consult WELL NO.: MW-1 INSTALLED DATE/TIME: START: 5/23/90 15:00 END: 5/23/90 17:00 ELEVATION - na DATUM - surface TOTAL DEPTH - 25.3'
SURFACE CONDITIONS: 2" asphalt		GEOLOGIST: RCK		SEC - TOWNSHIP - RANGE: na
1ST GROUNDWATER DATE TIME: approx 14' 5/23/90 13:40		GEOLOGIST: RCK		SEC - TOWNSHIP - RANGE: na

DEVELOPMENT METHOD: submersible pump	TYPE OF WELL: Monitor	REMARKS:
BORE VOLUME: 4.08gpf x 11ft = 45 gallons		

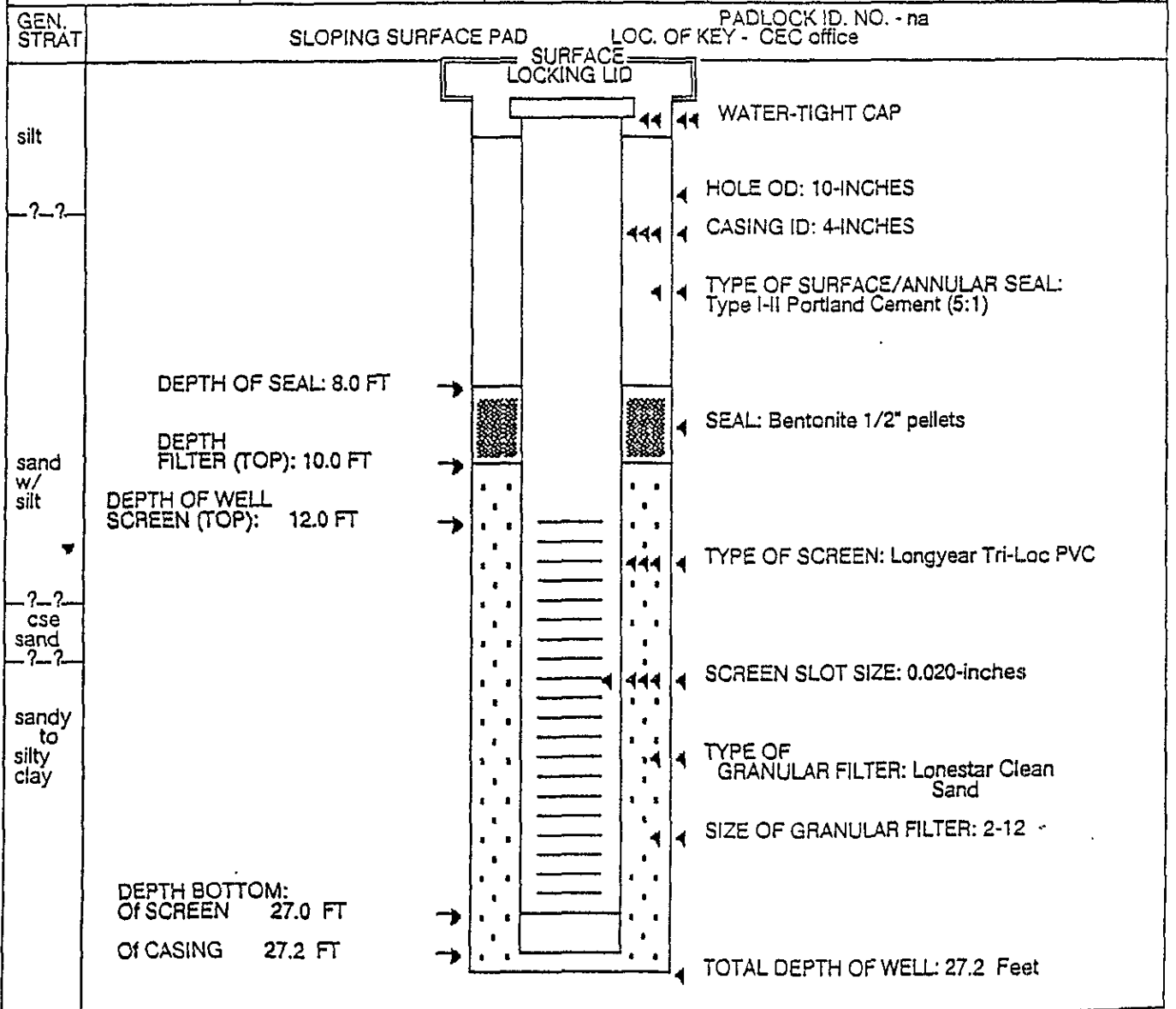


<b>LOCATION OF BORING</b> 		<b>PROJECT INFORMATION</b> NO.: C9017A NAME: CEC-Berkeley Land Co. LOCATION: 23555 Saklan Rd. Hayward, California DRILLING CO./FOREMAN Bay Land Drill/Bob Rogers DRILLING METHOD/RIG MODEL HSA 10" OD/CME 75 GEOPHYS. LOGS: na		CLIENT: Certified Environmental Consult WELL NO.: MW-2 INSTALLED DATE/TIME START: 5/22/90 12:05 END: 5/22/90 16:00 ELEVATION - na DATUM - surface TOTAL DEPTH - 27.3 SEC - TOWNSHP - RANGE na	
SURFACE CONDITIONS: 2" asphalt 1ST GROUNDWATER DATE TIME approx 14' 5/20/90 10:40 GEOLOGIST RCK		DEVELOPMENT METHOD submersible pump TYPE OF WELL: Monitor			
BORE VOLUME 4.08gpf x 13ft = 53 gallons		REMARKS:			
GEN. STRAT		SLOPING SURFACE PAD LOC. OF KEY - CEC office PADLOCK ID. NO. - na			
silty sand ?-? clyey sand ?-? silty sand ?-? clyey sand ?-? sandy clay to clyey sand					
DEPTH OF SEAL: 8.0 FT DEPTH FILTER (TOP): 10.3 FT DEPTH OF WELL SCREEN (TOP): 12.0 FT DEPTH BOTTOM: Of SCREEN 27.0 FT Of CASING 27.3 FT		WATER-TIGHT CAP HOLE OD: 10-INCHES CASING ID: 4-INCHES TYPE OF SURFACE/ANNULAR SEAL: Type I-II Portland Cement (5:1) SEAL: Bentonite 1/2" pellets TYPE OF SCREEN: Longyear Tri-Loc PVC SCREEN SLOT SIZE: 0.020-inches TYPE OF GRANULAR FILTER: Lonestar Clean Sand SIZE OF GRANULAR FILTER: 2-12 TOTAL DEPTH OF WELL: 27.3 Feet			



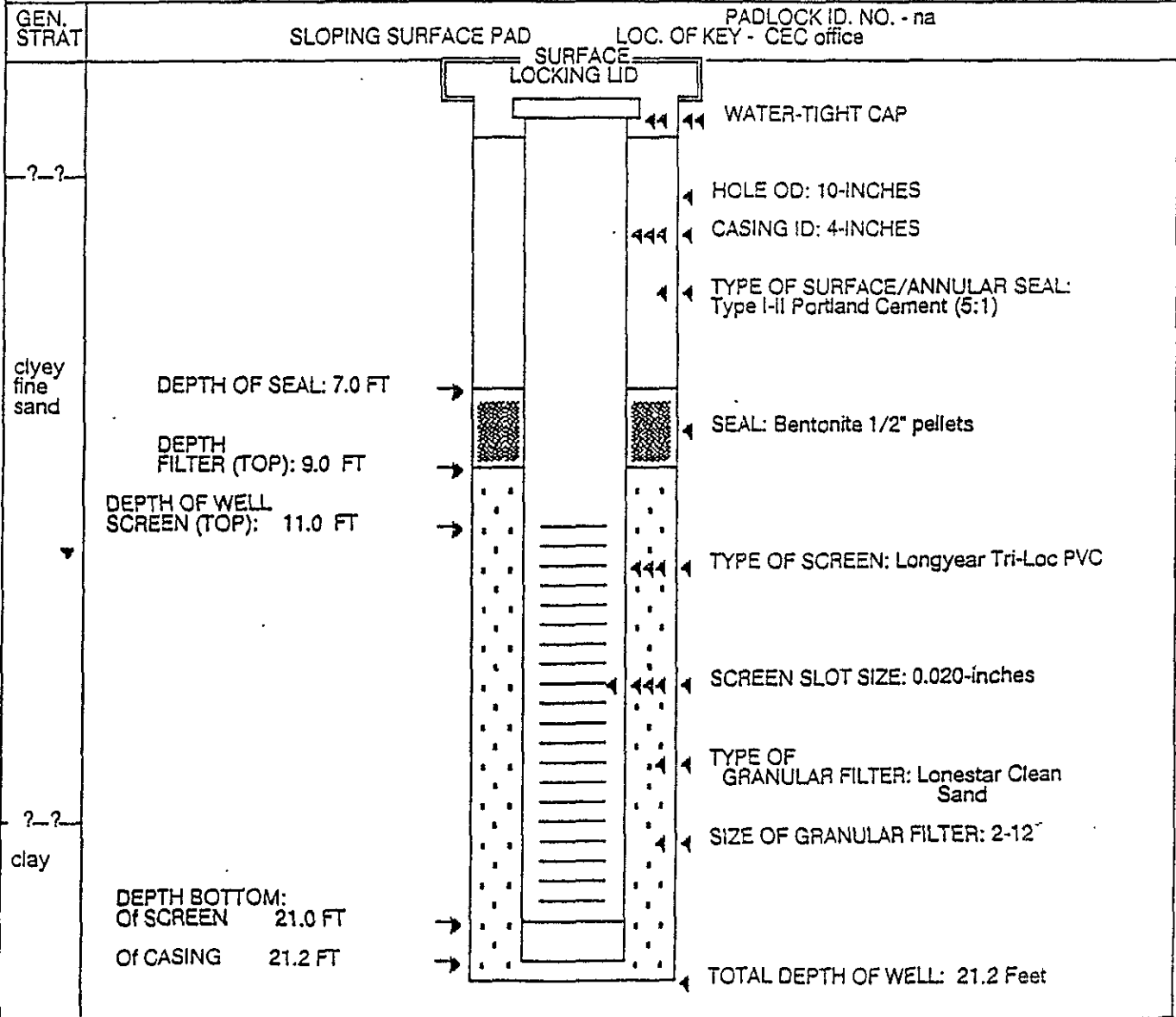
<b>LOCATION OF BORING</b> West property line 		<b>PROJECT INFORMATION</b> NO.: C9017A NAME: CEC-Berkeley Land Co. LOCATION: 23555 Saklan Rd. Hayward, California		CLIENT: Certified Environmental Consult WELL NO.: MW-4
SURFACE CONDITIONS: 14" concrete		DRILLING CO./FOREMAN Bay Land Drill/Bob Rogers		INSTALLED DATE/TIME START: 5/23/90 10:00 END: 5/23/90 15:00
1ST GROUNDWATER DATE TIME approx 15.5' 5/23/90 0830		GEOLOGIST RCK		ELEVATION - na DATUM - surface TOTAL DEPTH - 27.2'
		DRILLING METHOD/RIG MODEL HSA 10" OD/CME 75		SEC - TOWNSHP - RANGE na
		GEOPHYS. LOGS: na		

<b>DEVELOPMENT METHOD</b> submersible pump		<b>TYPE OF WELL:</b> Monitor		
<b>BORE VOLUME</b> 4.08gpf x 12ft = 49 gallons		REMARKS:		



LOCATION OF BORING 	PROJECT INFORMATION NO.: C9017A NAME: CEC-Berkeley Land Co. LOCATION: 23555 Saklan Rd. Hayward, California		CLIENT: Certified Environmental Consult WELL NO.: MW-5
	DRILLING CO./FOREMAN Bay Land Drill/Bob Rogers		INSTALLED DATE/TIME START: 5/21/90 09:30 END: 5/22/90 16:30
SURFACE CONDITIONS: 2" asphalt		DRILLING METHOD/RIG MODEL HSA 10" OD/CME 75	ELEVATION - na DATUM - surface TOTAL DEPTH - 21.2'
1ST GROUNDWATER DATE TIME 14.7' 5/21/90 11:30	GEOLOGIST RCK	GEOPHYS. LOGS: na	SEC - TOWNSHP - RANGE na

DEVELOPMENT METHOD submersible pump	TYPE OF WELL: Monitor		
BORE VOLUME 4.08gpf x 6.5 ft = 27 gallons	REMARKS:		





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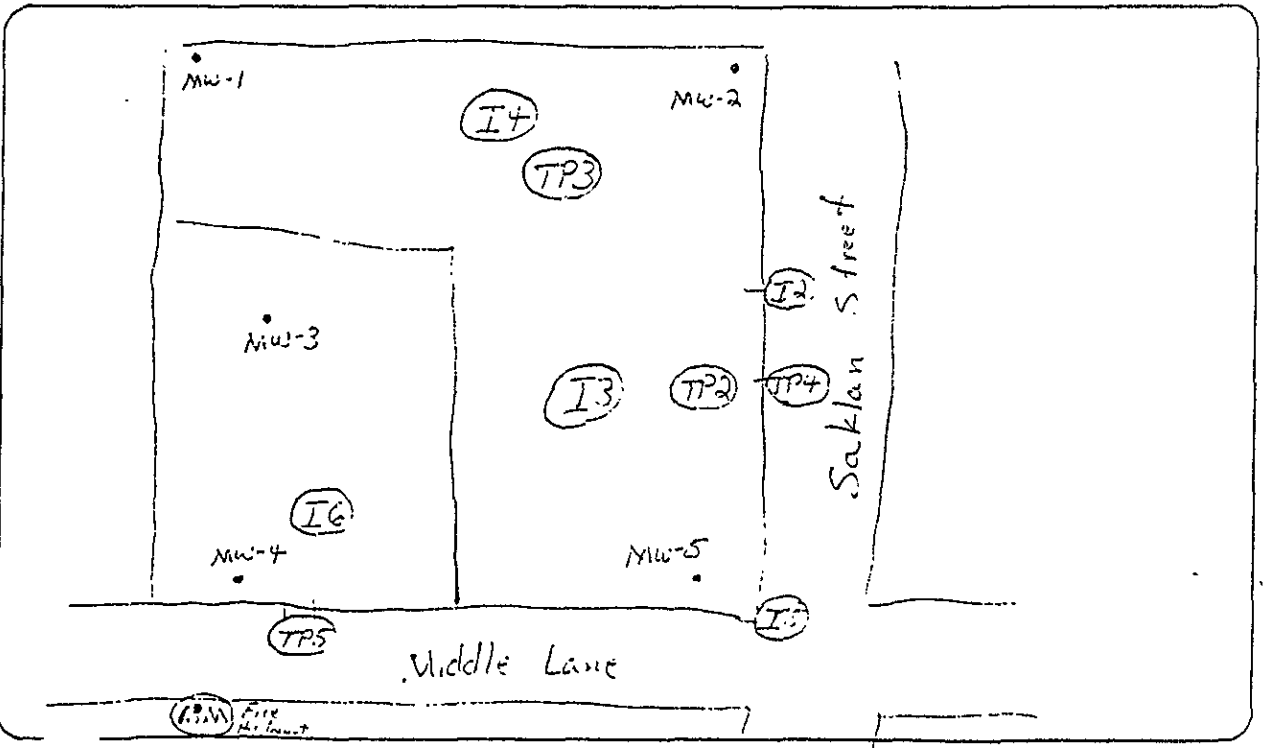
DATE: 6-7-90

PAGE 1 OF 2

### FIELD SURVEY RECORD

CLIENT Berkeley Land Co LOCATION 23555 Saklan Road, Hayward, CA  
 SURVEYORS Condit/Marken WEATHER Clear

STATION	BACK SIGHT	HI	FORE SIGHT	ELEVATION	WATER DEPTH	WATER ELEVATION
B.M.				100.00		
I 1	3.94	103.94				
TP 1			4.22	99.72		
I 2	5.46	105.15				
TP 2			5.34	99.84		
I 3	5.48	105.22				
MW-2			4.78	100.54	15.33	85.21
MW-5			6.51	98.81	13.75	85.06
TP 3			4.73	100.59		
I 4	5.91	106.50				
MW-1			6.51	99.99	15.07	84.92
TP 4			6.62	99.38		
I 5	5.77	105.35				
TP 5			6.98	98.37		







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DATE: 6-7-96

PAGE 2 OF 2

### FIELD SURVEY RECORD

CLIENT Berkeley Land Co LOCATION \_\_\_\_\_

SURVEYORS \_\_\_\_\_ WEATHER \_\_\_\_\_

STATION	BACK SIGHT	HI	FORE SIGHT	ELEVATION	WATER DEPTH	WATER ELEVATION
IG	6.20	107.57				
MW-4			6.34	99.23	13.39	84.84
MW-3			4.69	99.88	14.95	84.93
BM			4.54	100.03		



# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80892

DATE RECEIVED: 05/21/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 05/27/90

CLIENT JOB NO.: 89-57-237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/Kg) Gasoline Range
3	S-3	ND<1
4	S-4	ND<1

mg/kg - parts per million (ppm)

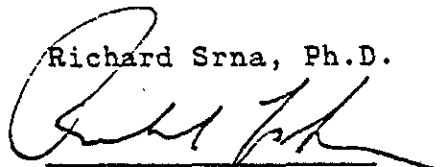
Method Detection Limit for Gasoline in Soil: 1 mg/Kg

#### QAQC Summary:

Daily Standard run at 2mg/L: RPD Gasoline = 0

MS/MSD Average Recovery = 98%: Duplicate RPD = 0

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 80892

DATE RECEIVED: 05/21/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 05/27/90

CLIENT JOB NO.: 89-57-237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/Kg) Diesel Range
1	S-1	ND<10
2	S-2	ND<10
3	S-3	ND<10
4	S-4	ND<10
5	S-5	ND<10

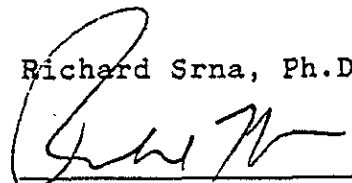
mg/kg - parts per million (ppm)

Method Detection Limit for Diesel in Soil: 10 mg/Kg

#### QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 5  
RPD Diesel = 10  
MS/MSD Average Recovery = 99%: Duplicate RPD = 0

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 80892

DATE RECEIVED: 05/21/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 05/27/90

CLIENT JOB NO.: 89-57-237

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/Kg)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
3	S-3	ND<3	ND<3	ND<3	ND<3
4	S-4	ND<3	ND<3	ND<3	ND<3

ug/Kg - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/Kg

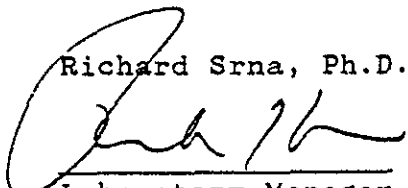
### QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%

MS/MSD Average Recovery = 95

#: Duplicate RPD = <1

Richard Srna, Ph.D.



Laboratory Manager



Environmental Consulting, Inc.

140 West Industrial Way, Benicia, CA, 94510-1016

Ofc. (707) 745-0171 (800) 447-0171 Fax. (707) 745-0163

# Chain of Custody Record

50902

Date \_\_\_\_\_ Sheet \_\_\_\_\_ of \_\_\_\_\_

Project Number: 89-57-237  
 Project Name: Berkeley Farms  
 Client: Berkeley Farms  
 Contact: \_\_\_\_\_  
 Address: \_\_\_\_\_

Sampler's Name: Scott L. Parker  
 Sampler's Signature: [Signature]

Lab Name: Supertec Analytical  
 Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

### Turnaround Time

Rush  24 Hour  48 Hour  Normal

Report to: Scott Parker

Sample Number	Date	Time	Location
S-6	5/22/90	9:50	MW-2
S-7	↓	10:05	↓
S-8	↓	10:25	↓
S-9	↓	10:45	↓
S-10	↓	11:00	↓

Parameters										Other									
BTEX	Total Petroleum Hydrocarbons	Oil and Grease	CAM Metals (18)	General Minerals	Pt. Pollutant Metals (15)	Base/Neu/Acids (Organic)	Pesticides	Volatile Organics (601/602)	Volatile Organics (624)	Asbestos	PCB								
X	X																		
↓	↓																		
↓	↓																		
↓	↓																		

Comments

Relinquished By	Date	Time
<u>Scott L. Parker</u>	<u>5/22/90</u>	<u>2:00</u>
<u>[Signature]</u>	<u>5/23/90</u>	<u>1:10</u>
Dispatched By	Date	Time

Received By	Date	Time
<u>[Signature]</u>	<u>5/22/90</u>	<u>7:00 pm</u>
<u>[Signature]</u>		
<u>[Signature]</u>		
Received in Lab By	Date	Time
<u>Doreen Roche</u>	<u>5/23/90</u>	<u>13:00</u>

Total Number of Containers This Sheet: 5

Method of Shipment: Cooler

Special Shipment / Handling or Storage Requirements:

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80902

DATE RECEIVED: 05/23/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 05/31/90

CLIENT JOB NO.: 89-57-237

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS  
by Modified EPA SW-846 Method 5030 and 8015

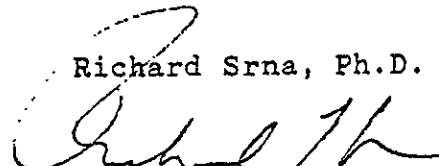
LAB #	Sample Identification	Concentration (mg/Kg) Gasoline Range
3	MW-2 S-8	ND<1
4	MW-2 S-9	ND<1

Method Detection Limit for Gasoline in Soil: 1 mg/Kg  
Method Detection Limit for Gasoline in Water: 0.05 mg/L

### QAQC Summary:

Daily Standard run at 2mg/L: RPD Gasoline = 2%  
MS/MSD Average Recovery = 94%: Duplicate RPD = 11%

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80902

DATE RECEIVED: 05/23/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 05/31/90

CLIENT JOB NO.: 89-57-237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

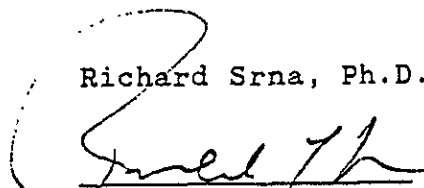
LAB #	Sample Identification	Concentration (mg/Kg) Diesel Range
3	MW-2 S-8	ND<10
4	MW-2 S-9	ND<10
ND<10	ND<10	

Method Detection Limit for Gasoline and Diesel in Soil: 10 mg/Kg  
Method Detection Limit for Gasoline and Diesel in Water: 1 mg/L  
Method Detection Limit for Diesel in Water: 0.05 mg/L

#### QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 2%  
RPD Diesel = 11%  
MS/MSD Average Recovery = 80%: Duplicate RPD = 2%

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE



# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 80902

DATE RECEIVED: 05/23/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 05/31/90

CLIENT JOB NO.: 89-57-237

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/Kg)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
3	MW-2 S-8	ND<3	ND<3	ND<3	ND<3
4	MW-2 S-9	ND<1	ND<3	ND<3	ND<3

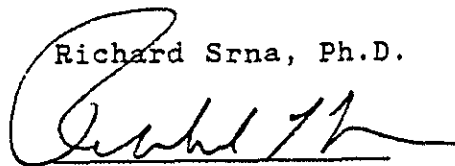
ug/L - parts per billion (ppb)  
ug/Kg - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/Kg  
Method Detection Limit in Water: 0.3 ug/L

### QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%  
MS/MSD Average Recovery = 93      %: Duplicate RPD = <2%

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE



Environmental Consulting, Inc.

140 West Industrial Way, Benicia, CA, 94510-1016  
Ofc. (707) 745-0171 (800) 447-0171 Fax. (707) 745-0171

50503

# Chain of Custody Record

Date 5/23/90 Sheet 1 of 1

Project Number: 8957237  
Project Name: Berkeley Farms  
Client: u  
Contact: \_\_\_\_\_  
Address: \_\_\_\_\_

Sampler's Name: Scott Parker  
Sampler's Signature: [Signature]

				Parameters										Other						
Sample Number	Date	Time	Location	B.I.E.X. + gas	Total Petroleum Hydrocarbons (10)	Oil and Grease	CAM Metals (18)	General Minerals	Pr. Pollutant Metals (15)	Base/Neu/Acids (Organic)	Pesticides	Volatile Organics (601/602)	Volatile Organics (624)	Asbestos	PCB					
MW1/56	5/23/90		MW-1																	
MW1/54			↓	X	X															
MW1/53			↓	X	X															
MW1/52			↓																	
MW1/51			↓																	
MW4/56			MW/4																	
MW4/54			↓	X	X															
MW4/53			↓	X	X															
MW4/52			↓																	
MW4/51			↓																	

Lab Name: Superior  
Address: 9447 Arnold Way  
Phone Number: \_\_\_\_\_  
Turnaround Time:  
 Rush  
 24 Hour  
 48 Hour  
 Normal  
 Report to: \_\_\_\_\_

Comments:  
Hold for Analysis  
Hold for Analysis  
Hold for Analysis

Relinquished By <u>[Signature]</u>	Date <u>5/23/90</u>	Time <u>20:20</u>	Received By <u>[Signature]</u>	Date <u>5/23/90</u>	Time <u>20:20</u>
Dispatched By <u>[Signature]</u>	Date <u>5/24/90</u>	Time <u>11:50</u>	Received in Lab By <u>[Signature]</u>	Date <u>5/24/90</u>	Time <u>11:50</u>

Total Number of Containers This Sheet: 10  
 Method of Shipment: Ice Chest  
 Special Shipment / Handling or Storage Requirements: \_\_\_\_\_

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80903

DATE RECEIVED: 05/24/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/01/90

CLIENT JOB NO.: 8957237

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS  
by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/Kg) Gasoline Range
2	MW1/S4	ND>1
3	MW1/S3	ND<1
7	MW4/S4	ND<1
8	MW4/S3	ND<1

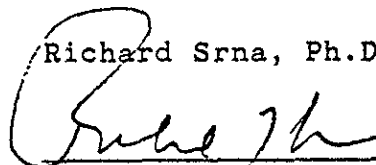
mg/kg - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 1 mg/Kg

### QAQC Summary:

Daily Standard run at 2mg/L: RPD Gasoline = 2  
MS/MSD Average Recovery = 94%: Duplicate RPD = 11

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80903

DATE RECEIVED: 05/24/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/01/90

CLIENT JOB NO.: 8957237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/Kg) Diesel Range
2	MW1/S4	ND<10
3	MW1/S3	ND<10
7	MW4/S4	ND<10
8	MW4/S3	ND<10

mg/kg - parts per million (ppm)

Method Detection Limit for Diesel in Soil: 10 mg/Kg

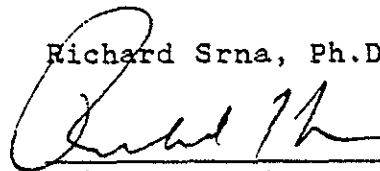
#### QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 2

RPD Diesel = 11

MS/MSD Average Recovery = 80%: Duplicate RPD = 2

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

**SUPERIOR ANALYTICAL LABORATORY, INC.**

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80903

DATE RECEIVED: 05/24/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/01/90

CLIENT JOB NO.: 8957237

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/Kg)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
2	MW1/S4	ND<3	ND<3	ND<3	ND<3
3	MW1/S3	ND<3	ND<3	ND<3	ND<3
7	MW4/S4	ND<3	ND<3	ND<3	ND<3
8	MW4/S3	ND<3	ND<3	ND<3	ND<3

ug/Kg - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/Kg

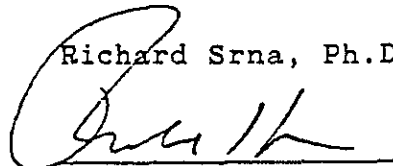
QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%

MS/MSD Average Recovery = 93

#: Duplicate RPD = <3

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

89106



Environmental Consulting, Inc.

# Chain of Custody Record

140 West Industrial Way, Benicia, CA, 94510-1016  
Ofc. (707) 745-0171 (800) 447-0171 Fax. (707) 745-0163

Date 5/24/90 Sheet 1 of 1

Project Number: 8957-237  
Project Name: Berkeley Farms  
Client: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Address: \_\_\_\_\_

Sampler's Name: Scott Parker  
Sampler's Signature: [Signature]

Sample Number	Date	Time	Location
B3/S1	5/24/90		BH-3
B3/S2			↓
B3/S3			↓
B1/S1			BH-1
B1/S2			↓
B1/S3			↓
B1/S4			↓

Parameters										Other			
B.I.E.X. 7445 5-24-90 es per S.P.	Total Petroleum Hydrocarbons Div 8	Oil and Grease	CAM Metals (18)	General Minerals	Pt. Pollutant Metals (15)	Base/Neop/Acids (Organic)	Pesticides	Volatile Organics (601/602)	Volatile Organics (624)	Asbestos	PCB		
X	X												
X	X												
X	X												
X	X												

Lab Name: Superior Analytical  
Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Turnaround Time:  
 Rush  24 Hour  48 Hour  Normal  
Report to: \_\_\_\_\_

Comments:  
Hold for Analysis  
Hold for Analysis  
↓

Relinquished By <u>[Signature]</u>	Date <u>5/24/90</u>	Time <u>1545</u>	Received By <u>[Signature]</u>	Date <u>5/24/90</u>	Time <u>4:00</u>
1. <u>[Signature]</u>					
2. <u>[Signature]</u>					
3. <u>[Signature]</u>					
Dispatched By <u>[Signature]</u>	Date	Time	Received in Lab By <u>[Signature]</u>	Date	Time

Total Number of Containers This Sheet: 7  
Method of Shipment: Ice Chest  
Special Shipment / Handling or Storage Requirements: \_\_\_\_\_

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80906

DATE RECEIVED: 05/24/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/01/90

CLIENT JOB NO.: 8957-237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/Kg) Gasoline Range
2	B3/S2	ND<1
3	B3/S3	ND<1
6	B1/S4	ND<1
7	B1/S4	ND<1

mg/kg - parts per million (ppm)

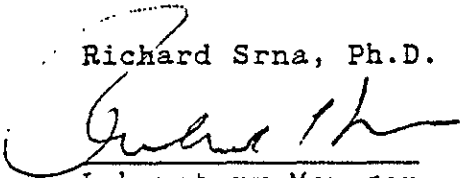
Method Detection Limit for Gasoline in Soil: 1 mg/Kg

#### QAQC Summary:

Daily Standard run at 2mg/L: RPD Gasoline = 0

MS/MSD Average Recovery = 103%: Duplicate RPD = 2

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80906

DATE RECEIVED: 05/24/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/01/90

CLIENT JOB NO.: 8957-237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/Kg) Diesel Range
2	B3/S2	ND<10
3	B3/S3	ND<10
6	B1/S4	ND<10
7	B1/S4	ND<10

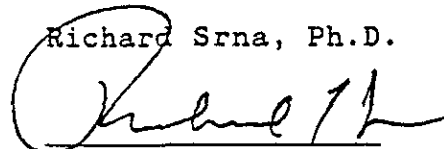
mg/kg - parts per million (ppm)

Method Detection Limit for Diesel in Soil: 10 mg/Kg

#### QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 2  
RPD Diesel = 11  
MS/MSD Average Recovery = 80%: Duplicate RPD = 2

Richard Srna, Ph.D.



Laboratory Manager



# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 80906

DATE RECEIVED: 05/24/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/01/90

CLIENT JOB NO.: 8957-237

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/Kg)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
2	B3/S2	ND<3	ND<3	ND<3	ND<3
3	B3/S3	ND<3	ND<3	ND<3	ND<3
6	B1/S4	ND<3	ND<3	ND<3	ND<3
7	B1/S4	ND<3	ND<3	ND<3	ND<3

ug/Kg - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/Kg

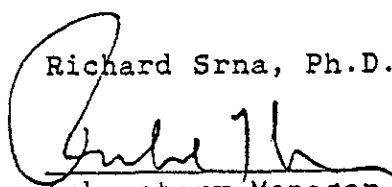
### QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%

MS/MSD Average Recovery = 97

#: Duplicate RPD = <2

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

80937



Environmental Consulting, Inc.

# Chain of Custody Record

140 West Industrial Way, Benicia, CA, 94510-1016  
 Ofc. (707) 745-0171 (800) 447-0171 Fax. (707) 745-0163

Date 5/30/90 Sheet      of     

Project Number: 89-57-237  
 Project Name: Berkeley Farms Highway  
 Client: Berkeley Land Co.  
 Contact: \_\_\_\_\_  
 Address: \_\_\_\_\_

Sampler's Name: Scott Parker  
 Sampler's Signature: Scott J. Parker

				Parameters										Other					
Sample Number	Date	Time	Location	BTEX	Total Petroleum Hydrocarbons (TPH)	Oil and Grease	CAM Metals (18)	General Minerals	Pt. Polutant Metals (13)	Base/Neu/Acids (Organic)	Pesticides	Volatile Organics (601/602)	Volatile Organics (624)	Asbestos	PCB				
MW3/51	5/30/90		MW3	X	X														
MW3/52			↓	X <sup>v</sup>	X <sup>v</sup>														
<del>MW3/53</del>			↓	X <sup>v</sup>	X <sup>v</sup>														
MW3/54			↓	X	X														
BH4/51			BH4	X	X														
BH4/52			↓	X <sup>v</sup>	X <sup>v</sup>														
BH4/53			↓	X <sup>v</sup>	X <sup>v</sup>														
BH2/51			BH-2	X <sup>v</sup>	X <sup>v</sup>														

Lab Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 Phone Number \_\_\_\_\_

Turnaround Time  
 Rush 24 Hour  
 48 Hour  
 Normal

Report to: \_\_\_\_\_

Comments

Hold

Hold

Hold

Relinquished By	Date	Time	Received By	Date	Time
1. <u>Scott J. Parker</u>	<u>5/31/90</u>	<u>11:10</u>	1. _____		
2. _____			2. _____		
3. _____			3. _____		
Dispatched By	Date	Time	Received in Lab By	Date	Time
			<u>Branch Salinas</u>	<u>05/31/90</u>	<u>11:18</u>

Total Number of Containers This Sheet: 8

Method of Shipment: Ice Chest.

Special Shipment / Handling or Storage Requirements:

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80937

DATE RECEIVED: 05/31/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/06/90

CLIENT JOB NO.: 89-57-237

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS  
by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/Kg) Gasoline Range
2	MW3/S2	ND<1
3	MW3/S3	ND<1
6	BH4/S2	ND<1
7	BH4/S3	ND<1
8	BH2/S1	ND<1

mg/kg - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 1 mg/Kg

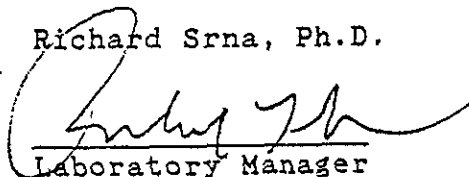
Method Detection Limit for Gasoline in Water: 0.05 mg/L

### QAQC Summary:

Daily Standard run at 2mg/L: RPD Gasoline = 13%

MS/MSD Average Recovery = 89%: Duplicate RPD = 0%

Richard Srna, Ph.D.



Laboratory Manager

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80937

DATE RECEIVED: 05/31/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/06/90

CLIENT JOB NO.: 89-57-237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/Kg) Diesel Range
2	MW3/S2	ND<10
3	MW3/S3	250
6	BH4/S2	ND<10
7	BH4/S3	ND<10
8	BH2/S1	ND<10

Method Detection Limit for Gasoline and Diesel in Soil: 10 mg/Kg

Method Detection Limit for Gasoline and Diesel in Water: 1 mg/L

Method Detection Limit for Diesel in Water: 0.05 mg/L

#### QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 4%

RPD Diesel = 9%

MS/MSD Average Recovery = 102%: Duplicate RPD = 16%

Richard Srna, Ph.D.

  
Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 80937 DATE RECEIVED: 05/31/90  
 CLIENT: Certified Environmental Consulting, DATE REPORTED: 06/06/90  
 CLIENT JOB NO.: 89-57-237

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
 by EPA SW-846 Methods 5030 and 8020

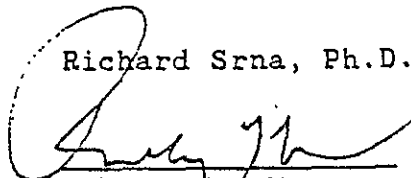
LAB #	Sample Identification	Concentration(ug/Kg)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
2	MW3/S2	ND<3	ND<3	ND<3	ND<3
3	MW3/S3	4	6	12	58
6	BH4/S2	ND<3	ND<3	ND<3	ND<3
7	BH4/S3	ND<3	ND<3	ND<3	ND<3
8	BH2/S1	ND<3	ND<3	ND<3	ND<3

ug/L - parts per billion (ppb)  
 ug/Kg - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/Kg  
 Method Detection Limit in Water: 0.3 ug/L

### QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%  
 MS/MSD Average Recovery = 98      %: Duplicate RPD = <10%

Richard Srna, Ph.D.  
  
 Laboratory Manager

80960



Environmental Consulting, Inc.

140 West Industrial Way, Benicia, CA, 94510-1016

Ofc. (707) 745-0171 (800) 447-0171 Fax. (707) 745-0163

### Chain of Custody Record

Date 6/4/90 Sheet 1 of 1

Project Number: 8957237  
 Project Name: Berkeley Farms  
 Client: \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Address: \_\_\_\_\_

Sampler's Name: Scott Parker  
 Sampler's Signature: Scott J Parker

Parameters										Other			
B.T.E.X.	Total Petroleum Hydrocarbons	Oil and Grease	CAM Metals (18)	General Minerals	Pr. Pollutant Metals (13)	Base/Neu/Acids (Organic)	Pesticides	Volatile Organics (601/602)	Volatile Organics (624)	Asbestos	PCB	Other	
X	X	X											
X	X	X											

Lab Name: Superior  
 Address: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
 Turnaround Time:  
 Rush  24 Hour  48 Hour  Normal  
 Report to: \_\_\_\_\_

Sample Number	Date	Time	Location
BH252	6/4/90		BH2
MW4	↓		MW4

Comments

Relinquished By	Date	Time	Received By	Date	Time
1. <u>Scott J Parker</u>	<u>6/4/90</u>	<u>5:00 p.m.</u>			
2. <u>Scott J Parker</u>	<u>6/5/90</u>	<u>11:25</u>			
3.					
Dispatched By	Date	Time	Received in Lab By	Date	Time
			<u>[Signature]</u>	<u>6/5/90</u>	<u>11:30</u>

Total Number of Containers This Sheet: 4  
 Method of Shipment: Ice Chest.  
 Special Shipment / Handling or Storage Requirements:

SP6490

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80960

DATE RECEIVED: 06/05/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/11/90

CLIENT JOB NO.: 8957237

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS  
by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/Kg, mg/L*) Gasoline Range
1	BH2S2	ND<1
2	MW4	ND<0.05*

mg/kg, mg/L - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 1 mg/Kg

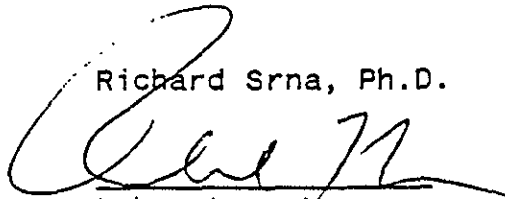
Method Detection Limit for Gasoline in Water: 0.05 mg/L

### QAQC Summary:

Daily Standard run at 2mg/L: RPD Gasoline = 12

MS/MSD Average Recovery = 98%: Duplicate RPD = 0

Richard Srna, Ph.D.

  
Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80960

DATE RECEIVED: 06/05/90

CLIENT: Certified Environmental Consulting, DATE REPORTED: 06/11/90

CLIENT JOB NO.: 8957237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/Kg, mg/L*) Diesel Range
1	BH2S2	50
2	MW4	ND<1*

mg/kg - parts per million (ppm)

Method Detection Limit for Diesel in Soil: 10 mg/Kg

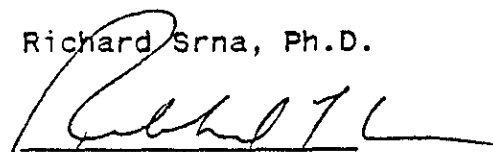
Method Detection Limit for Diesel in Water: 1 mg/L

#### QAQC Summary:

Daily Standard run at 200mg/L: RPD Diesel = 5

MS/MSD Average Recovery = 108%: Duplicate RPD = 3

Richard Srna, Ph.D.



Laboratory Manager



# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80960

DATE RECEIVED: 06/05/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/11/90

CLIENT JOB NO.: 8957237

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/Kg, ug/L*)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
1	BH2S2	ND<3	ND<3	11	22
2	MW4	ND<0.3*	ND<0.3*	ND<0.3*	ND<0.3*

ug/L - parts per billion (ppb)

ug/Kg - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/Kg

Method Detection Limit in Water: 0.3 ug/L

### QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%

MS/MSD Average Recovery = 95

%. Duplicate RPD = <5

Richard Srna, Ph.D.

  
Laboratory Manager

OUTSTANDING QUALITY AND SERVICE



Environmental Consulting, Inc.

SC 761

# Chain of Custody Record

140 West Industrial Way, Benicia, CA, 94510-1016  
 Ofc. (707) 745-0171 (800) 447-0171 Fax. (707) 745-0188

Date 5/23/90 Sheet      of     

Project Number: 8957237  
 Project Name: Berkeley Farms  
 Client: u  
 Contact: \_\_\_\_\_  
 Address: \_\_\_\_\_

Sampler's Name: Scott Parker  
 Sampler's Signature: Scott J. Parker

		Parameters											Other						
Sample Number	Date	Time	Location	B, I, E, X	Total Petroleum Hydrocarbons (10)	Oil and Grease	CAM Metals (18)	General Minerals	Pr. Pollutant Metals (15)	Base. Neu/Acids (Organic)	Pesticides	Volatile Organics (601/602)	Volatile Organics (624)	Asbestos	PCB				
✓ MW1/56	5/23/90		MW-1	✓	✓														
MW2/54			↓	X	X														
MW1/53			↓	X	X														
MW1/52			↓																
✓ MW1/51			↓																
MW4/56			MW/4	✓	✓														
MW4/54			↓	X	X														
MW4/53			↓	X	X														
MW4/52			↓																
MW4/51			↓																

Lab Name: Superior  
 Address: 8417 Arnold Way  
 Phone Number: \_\_\_\_\_

Turnaround Time  
 Rush  24 Hour  48 Hour  Normal

Report to: \_\_\_\_\_

Comments
Hold for Analysis
↓
Hold for Analysis
↓
Hold for Analysis
↓

Relinquished By	Date	Time	Received By	Date	Time
1. <u>Scott J. Parker</u>	<u>5/23/90</u>	<u>2020</u>	1. _____		
2. _____			2. _____		
3. _____			3. _____		
Dispatched By	Date	Time	Received in Lab By	Date	Time

Total Number of Containers This Sheet: 10

Method of Shipment: Ice Chest

Special Shipment / Handling or Storage Requirements: \_\_\_\_\_

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 80961

DATE RECEIVED: 06/05/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/06/90

CLIENT JOB NO.: 89-57-237

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS  
by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/Kg) Gasoline Range
1	MW-2 S-10	ND<1
2	MW-1/S5	ND<1
3	MW-4/S5	ND<1

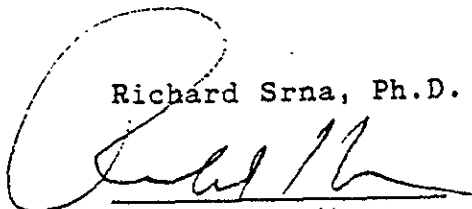
mg/kg - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 1 mg/Kg  
Method Detection Limit for Gasoline in Water: 0.05 mg/L

### QAQC Summary:

Daily Standard run at 2mg/L: RPD Gasoline = 4%  
MS/MSD Average Recovery = 94%: Duplicate RPD = 13%

Richard Srna, Ph.D.



Laboratory Manager

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 80961

DATE RECEIVED: 06/05/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/06/90

CLIENT JOB NO.: 89-57-237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/Kg) Diesel Range
1	MW-2 S-10	ND<10
2	MW-1/S5	ND<10
3	MW-4/S5	ND<10

Method Detection Limit for Gasoline and Diesel in Soil: 10 mg/Kg  
Method Detection Limit for Gasoline and Diesel in Water: 1 mg/L  
Method Detection Limit for Diesel in Water: 0.05 mg/L

#### QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 7%  
RPD Diesel = 6%  
MS/MSD Average Recovery = 83%: Duplicate RPD = 4%

Richard Srna, Ph.D.



Laboratory Manager

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 80961

DATE RECEIVED: 06/05/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/06/90

CLIENT JOB NO.: 89-57-237

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/Kg)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
1	MW-2 S-10	ND<3	ND<3	ND<3	ND<3
2	MW-1/S5	ND<3	ND<3	ND<3	ND<3
3	MW-4/S5	ND<3	ND<3	ND<3	ND<3

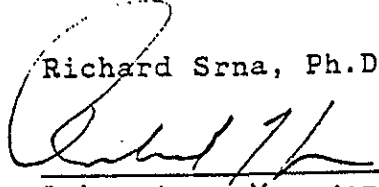
ug/L - parts per billion (ppb)  
ug/Kg - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/Kg  
Method Detection Limit in Water: 0.3 ug/L

### QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%  
MS/MSD Average Recovery = 96      %: Duplicate RPD = <2%

Richard Srna, Ph.D.

  
Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

81035



Environmental Consulting, Inc.

140 West Industrial Way, Benicia, CA, 94510-1016  
Ofc. (707) 745-0171 (800) 447-0171 Fax. (707) 745-0163

### Chain of Custody Record

Date 6/19/90 Sheet 1 of 1

Project Number: 90-57-237  
Project Name: Berkeley Farms  
Client: same  
Contact: \_\_\_\_\_  
Address: \_\_\_\_\_

Sampler's Name Scott Parker  
Sampler's Signature Scott F. Parker

Lab Name Superior  
Address \_\_\_\_\_  
Phone Number \_\_\_\_\_  
Turnaround Time  
 Rush  24 Hour  48 Hour  Normal  
Report to: \_\_\_\_\_

Sample Number	Date	Time	Location
MW-3	6/19/90	3:00pm	MW-3
↓	↓	↓	↓
↓	↓	↓	↓
↓	↓	↓	↓

B.T.E.X.	Parameters										Other				
	Total Petroleum Hydrocarbons <i>Best Diesel</i>	Oil and Grease	CAM Metals (18)	General Minerals	Pt. Pollutant Metals (13)	Base/Neu/Acids (Organic)	Pesticides	Volatile Organics (601/602)	Volatile Organics (624)	Asbestos	PCB				
X															

3 vials

Retinquished By	Date	Time	Received By	Date	Time
1. <u>Scott F. Parker</u>	<u>6/19/90</u>		1. _____		
2. _____			2. _____		
3. _____			3. _____		
Dispatched By	Date	Time	Received in Lab By	Date	Time
			<u>[Signature]</u>	<u>6/19/90</u>	<u>9:58</u>

Total Number of Containers This Sheet: 3  
Method of Shipment Ice Chest  
Special Shipment / Handling or Storage Requirements:  
keep cool

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 81035

DATE RECEIVED: 06/19/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/26/90

CLIENT JOB NO.: 90-57-237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/L)	
		Gasoline Range	Diesel Range
1	MW-3	ND<1	ND<1

mg/L - parts per million (ppm)

Method Detection Limit for Gasoline and Diesel in Water: 1 mg/L

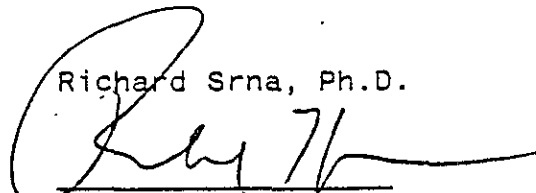
#### QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 10

RPD Diesel = 10

MS/MSD Average Recovery = 93%: Duplicate RPD = 5

Richard Srna, Ph.D.



Laboratory Manager

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 81035

DATE RECEIVED: 06/19/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 06/26/90

CLIENT JOB NO.: 90-57-237

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/L)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
1	MW-3	ND<0.3	ND<0.3	ND<0.3	ND<0.3

ug/L - parts per billion (ppb)

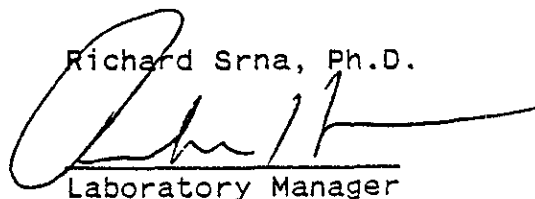
Method Detection Limit in Water: 0.3 ug/L

### QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%

MS/MSD Average Recovery = 104%: Duplicate RPD = 2

Richard Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE



81059



Environmental Consulting, Inc.

140 West Industrial Way, Benicia, CA, 94510-1016

Ofc. (707) 745-0171 (800) 447-0171 Fax. (707) 745-0166

# Chain of Custody Record

Date 6/22/90 Sheet 1 of 1

Project Number: 90-57-237  
 Project Name: Berkeley Farms  
 Client: \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Address: \_\_\_\_\_

Sampler's Name: Scott Parker  
 Sampler's Signature: Scott J Parker

Sample Number	Date	Time	Location
MW-1	6/22/90		MW-1
MW-2	↓		MW-2
MW-5	↓		MW-5

Parameters										Other					
B,TEX	Total Petroleum Hydrocarbons	Oil and Grease	CAM Metals (18)	General Minerals	Pt. Pollutant Metals (13)	Base/Neu/Acids (Organic)	Pesticides	Volatile Organics (601/602)	Volatile Organics (624)	Asbestos	PCB				
X	X														
↓	↓														

Lab Name: Superior  
 Address: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_

**Turnaround Time**  
 Rush  24 Hour  48 Hour  Normal

Report to: \_\_\_\_\_

Comments

Relinquished By	Date	Time	Received By	Date	Time
1. <u>Scott J Parker</u>	<u>6/22/90</u>	<u>4:45</u>	1. _____		
2. _____			2. _____		
3. _____			3. _____		
Dispatched By	Date	Time	Received in Lab By	Date	Time
			<u>Joanek Sabusky</u>	<u>6/22/90</u>	<u>4:57</u>

Total Number of Containers This Sheet: 9

Method of Shipment: Ice chest

Special Shipment / Handling or Storage Requirements:

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 81059  
CLIENT: ENVIRONMENTAL CONSULTING, INC.  
CLIENT JOB NO.: 90-57-237

DATE RECEIVED: 06/22/90  
DATE REPORTED: 06/26/90

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/L)	
		Gasoline Range	Diesel Range
1	MW-1	ND<1	ND<1
2	MW-2	ND<1	ND<1
3	MW-5	ND<1	ND<1

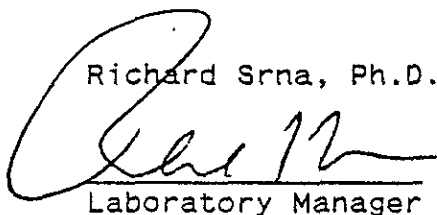
mg/L - parts per million (ppm)

Method Detection Limit for Gasoline and Diesel in Water: 1 mg/L

#### QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 8  
RPD Diesel = 6  
MS/MSD Average Recovery = 133%: Duplicate RPD = 3

Richard Srna, Ph.D.



Laboratory Manager

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 81059  
CLIENT: ENVIRONMENTAL CONSULTING, INC.  
CLIENT JOB NO.: 90-57-237

DATE RECEIVED: 06/22/90  
DATE REPORTED: 06/26/90

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/L)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
1	MW-1	ND<0.3	ND<0.3	ND<0.3	ND<0.3
2	MW-2	ND<0.3	ND<0.3	ND<0.3	ND<0.3
3	MW-5	ND<0.3	ND<0.3	ND<0.3	ND<0.3

ug/L - parts per billion (ppb)

Method Detection Limit in Water: 0.3 ug/L

### QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%  
MS/MSD Average Recovery = 105%: Duplicate RPD = <3

Richard Srna, Ph.D.

  
Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

81105



Environmental Consulting, Inc.

140 West Industrial Way, Benicia, CA, 94510-1016  
 Ofc. (707) 745-0171 (800) 447-0171 Fax. (707) 745-0133

### Chain of Custody Record

Date 7/3/90 Sheet 1 of 1

Gas + Diesel

Project Number: 90-57-237  
 Project Name: Berkeley Farms Hayward  
 Client: \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Address: \_\_\_\_\_

Sampler's Name: Scott Parker  
 Sampler's Signature: Scott J Parker

Sample Number	Date	Time	Location	Parameters											Other								
				B, T, E, X	Total Petroleum Hydrocarbons	Oil and Grease	CAM Metals (18)	General Minerals	Pt. Pollutant Metals (13)	Base/Neu/Acids (Organic)	Pesticides	Volatile Organics (601/602)	Volatile Organics (624)	Asbestos	PCB								
BFMW-3	7/3/90		MW-3	X	X																		

Lab Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
**Turnaround Time**  
 Rush     24 Hour     48 Hour     Normal  
 Report to: \_\_\_\_\_

Comments: Preserved w/ HCL

Relinquished By	Date	Time	Received By	Date	Time
<u>Scott J Parker</u>	<u>7/3/90</u>	<u>3:00</u>	<u>[Signature]</u>	<u>7/3</u>	<u>3:00</u>

Total Number of Containers This Sheet: 3  
 Method of Shipment: Ice Chest  
 Special Shipment / Handling or Storage Requirements: \_\_\_\_\_



# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 81105

DATE RECEIVED: 07/03/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 07/12/90

CLIENT JOB NO.: 90-57-237

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/L) Diesel Range
1	BF MW-3	ND<1

Method Detection Limit for Gasoline and Diesel in Water: 1 mg/L

#### QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 10%

RPD Diesel = 10%

MS/MSD Average Recovery = 102%: Duplicate RPD = 2%

Richard Srna, Ph.D.

  
Laboratory Manager

**SUPERIOR ANALYTICAL LABORATORY, INC.**

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

**C E R T I F I C A T E   O F   A N A L Y S I S**

LABORATORY NO.: 81105

DATE RECEIVED: 07/03/90

CLIENT: Certified Environmental Consulting,

DATE REPORTED: 07/12/90

CLIENT JOB NO.: 90-57-237

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/L)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
1	BF MW-3	ND<0.3	ND<0.3	ND<0.3	ND<0.3

ug/L - parts per billion (ppb)

Method Detection Limit in Water: 0.3 ug/L

**QA/QC Summary:**

Daily Standard run at 20ug/L: RPD = <15%

MS/MSD Average Recovery = 109

#: Duplicate RPD = <4%

Richard Srna, Ph.D.

*Dorena Srna*

Laboratory Manager



May 14, 1990

Ref No. 89-57-237

Mr. Tim Blaney  
Berkeley Land Company  
1211 Newell Avenue, Suite 120  
Walnut Creek, CA 94596

Subject: 23555 Saklan Avenue, Hayward; Diesel Fuel Release Disclosure to  
Regulatory Agencies

Dear Mr. Blaney:

As indicated in Certified Environmental Consulting, Inc.'s (CEC) report of March 26, 1990 titled "Initial Site Survey and Preliminary Assessment Plan for Hayward Site" diesel fuel was found on top of the water in a well located on the subject property. This can be interpreted to be a spill or accidental release of a hazardous substance to the waters of the State.

Even though there is no evidence that Berkeley Land Company (BLC) may be responsible for the presence of the diesel in the water, BLC has an obligation to report the release to the appropriate environmental regulatory agencies. Failure to report the release can lead to civil and/or criminal penalties.

The report usually must be made by the "owner or operator" of the facility. The agency designated to receive the report varies depending upon the reporting requirements. According to Alameda County's letter of October 13, 1989, an unauthorized release report has been filed with the County. This may satisfy some of the notification requirements.

However, failure to notify all appropriate agencies may expose one to civil or criminal liability even though the report has been made to one of the agencies. The reporting obligation can be satisfied initially by a telephone call. A confirming letter that the report was made is advised.

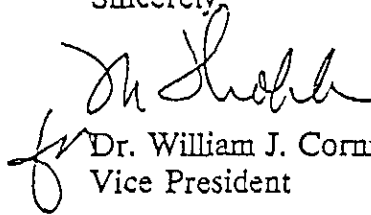


Mr. Tim Blaney  
Page 2  
May 14, 1990

To help you determine who to contact concerning this release CEC has enclosed a spread sheet. Because of complexities of the reporting requirements, CEC recommends that you discuss this letter with your legal counsel. It may be determined by legal counsel that different or additional regulatory agencies need to be notified.

Please call if you have any questions.

Sincerely,

  
Dr. William J. Cornils, CIH  
Vice President

WJC:cak

Enclosure

cc: Barry M. Gallagher  
Gallagher & Parton

REPORTING REQUIREMENTS  
FOR  
23555 SAKLAN AVENUE, HAYWARD

<u>Statute</u>	<u>Paragraph</u>	<u>Reporting Agency</u>	<u>Penalty</u>
California Water Code	13271 & 13272	California Office of Emergency Services (800) 852-7550	Fine between \$500 and \$5,000 per day and/or imprisonment for not more than one year.
California Health and Safety Code	25507	California Office of Emergency Services (800) 852-7550 County of Alameda (415) 271-4320	Fine of \$25,000 per day or imprisonment.
California Health and Safety Code	25189(c),(d), and 25189.2(c)	Department of Health Services (415) 540-2043	Fine between \$1,000 and \$25,000 per day.
California Health Safety Code	25295	County of Alameda (415) 271-4320	Fine between \$500 and \$10,000 per day or imprisonment.